

The Daily Wire

THE OFFICIAL EUROPCR COURSE NEWSPAPER

EDITION TWO, 18 MAY 2022

2022 | euro
PCR

The cathlab of tomorrow

Here today and at
EuroPCR 2022 [Page 10](#)

20 years of TAVI

Revolutionising medicine
since 2002 [Page 14](#)

EAPCI-PCR Fellows Course

Gets off to a great start
[Page 16](#)



HANDS ON!

“Interventional cardiologists need to be ready for all eventualities”

Simulation-based learning sessions continue today and the Training Village is waiting for your visit

PHILIPS

What if you could learn step by step how to administer ultra-low contrast in complex PCI?

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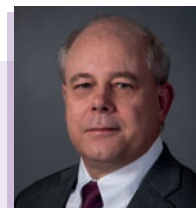
Wednesday 18 May, 09:30 - 10:30
Thursday 19 May, 09:00 - 10:00

Simulation-based learning IN THE SPOTLIGHT



Kentaro Hayashida

*Interventional cardiologist / Cardiologist
Keio University School of Medicine - Tokyo, Japan*



Göran Olivecrona

*Interventional cardiologist / Cardiologist
Lund University / Skane University Hospital - Lund, Sweden*

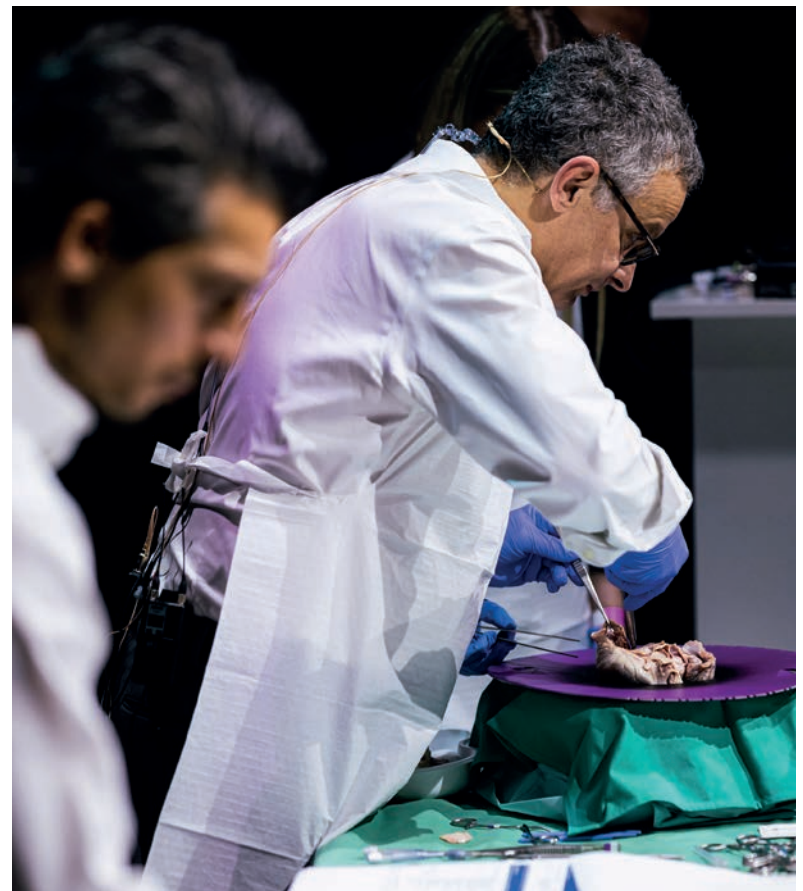
Numerous simulation-based learning sessions at EuroPCR 2022 serve to highlight just how useful this approach is for training. Two leaders of today’s sessions tell us more about the value of simulation and what participants can expect to see.

First, we visit the Terumo Medical Pranex Centre, Japan, for a session that is part of a series of educational collaborations between PCR and Terumo Learning EDGE. The facilitator, Professor Kentaro Hayashida, explains the technique that will be simulated: “Left main disease is commonly treated with a single-stent technique, but bifurcation stenting is sometimes required in this situation. Simulation-based learning is an ideal way to demonstrate a two-stent strategy, and, step-by-step, we will show participants how to perform image-guided Culotte stenting. We will use an in vitro heartbeat model that provides a really good environment for practice and to visualise how the stents are deployed.”

Professor Hayashida hopes participants will ask questions about this interesting model and its use in a range of simulations. He also highlights, “Having access to this model and the facilities at the Terumo Medical Pranex Centre, including a fully equipped simulated cathlab, really help younger colleagues enhance their understanding of different interventions before they are ‘hands on’ in a human – it’s also a chance to make mistakes and learn from them.”

This is the first live simulated session from Japan performed at EuroPCR. Professor Hayashida explains, “In Japan, we follow the guidelines and established consensus developed globally, but each country has its own specific techniques and preferences. Device availability can also vary. We use image guidance frequently in Japan, but we know that many countries do not have the same reimbursement. It is important to highlight differences and to share knowledge where countries have extensive experience in certain areas.”

Simulation-based learning also proves invaluable for those rare moments when complications occur or when a bailout strategy is needed. Back in Paris, Professor Göran Olivecrona is the anchorperson of a simulated session on managing acute coronary perforation. He explains, “**The best way to prepare for complications is to experience them in a calm environment**, where you can mentally prepare the steps rather than come up with ad-hoc solutions in



an emergency. Just as a pilot spends hours in a simulator, so interventional cardiologists need to be ready for all eventualities. Mentice has developed a very nice model for simulation of a perforation in a coronary artery, and I hope that more models in different types of arteries will become available.”

“This session is not about watching skilled operators manage life-threatening situations,” he continues. “We will bring in the audience to tackle the different steps and will discuss the right and wrong directions with onsite and online attendees.”

So who should attend the simulation-based learning sessions? Professor Olivecrona sees the appeal for younger participants who may not have seen these complications during their fellowship, but he also thinks that all levels of operators have something to gain. “Even for cathlab directors, seeing different types of simulations can strike a chord. You can envisage how **younger members of your team might really benefit** and try to incorporate different simulation models into your training programmes.”

In addition to the continuation of the simulation-based learning programme throughout the Course and the opportunities in the Training Village, Studio A transforms into a simulation lab from Thursday and deals with ‘pearls and pitfalls’ on Friday. Seats are limited in certain sessions so take your place early for some unique hands-on experience!



DON'T MISS

Joint educational projects between PCR and Terumo Learning EDGE: Image-guided bifurcation stenting - In vitro beating heart simulation-based learning from Japan

Wednesday, Theatre Bordeaux, 08:30 – 10:00

Bailout options and techniques during PCI: stent dislodgement*

Wednesday, Room 243, 08:30 – 10:00 and 10:30 – 12:00

Thursday, Room 243, 08:30 – 10:00, 15:15 – 16:45 and 17:00 – 18:30

Bailout options and techniques during PCI: distal perforation*

Wednesday, Room 243, 14:45 – 16:15

Thursday, Room 243, 10:30 – 12:00

*These sessions have limited spaces, which will be allocated on a first-come, first-served basis

Sessions made available thanks to the in-kind support of Mentice: Managing acute coronary perforation: a simulation-based team approach

Wednesday, Studio Havane, 10:30 – 12:00

Intra-cardiac echocardiography training workshop

Thursday, Room Learning, 15:15 – 16:45

Check out the simulation lab studio in Studio A on Thursday!

Antegrade CTO - The techniques

08:30 – 10:00 (in-kind support from Asahi Intecc)

How to deal with difficult situations by a multidisciplinary team

10:30 – 12:00 (in-kind support from Mentice, Siemens Healthineers and Laerdal France)

TAVI best practice: implementing cusp overlap and commissural alignment

15:15 – 16:45 (in-kind support from Abbott, Boston Scientific, IMMR and Medtronic)

Mastering transseptal puncture for mitral interventions

17:00 – 18:30 (in-kind support from Abbott, Alfieri Heart Foundation, Baylis Medical, IMMR, Medtronic, Mentice, Simulands)

Check out the pearls and pitfalls sessions in Studio A on Friday!

(in-kind support from Terumo Learning EDGE)

Pearls and pitfalls of:

Provisional stenting 08:30 – 09:15

TAP stenting 09:25 – 10:10

Culotte stenting 10:20 – 11:05

DK Crush stenting 11:15 – 12:00

PCR
NEXT COURSES

- AICT asia PCR**
6-8 October 2022
Singapore
- PCR·CIT**
china chengdu valves
4-6 November 2022
Chengdu
- PCR**
london valves
27-29 November 2022
London
- gulf PCR**
14-15 December 2022
Dubai
- PCR**
tokyo valves
17-19 February 2023
Tokyo
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LIVE CENTRES IN FOCUS

Screened from renowned centres of excellence, LIVE cases provide an unparalleled learning experience and the opportunity to take home techniques and best practices for optimal patient care.



London, United Kingdom
St Thomas' Hospital

Centre established in 1100

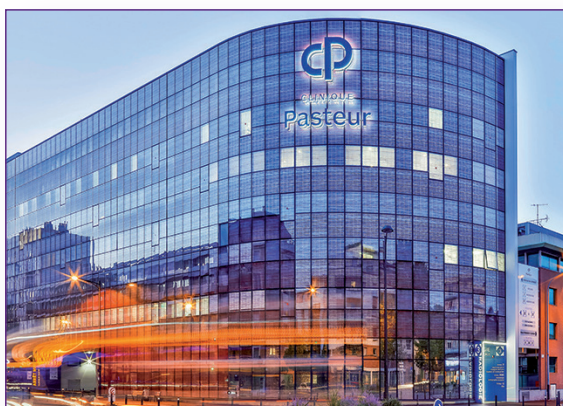
Practitioners include >30 cardiologists, 3 structural interventionists, 1 valve fellow, 4 structural heart disease nurses and 8 cardiac surgeons

Most frequent types of interventions/procedures: TAVI, TAVI in mitral, mitral edge-to-edge repair, complex PCI, Impella, ECMO

How would you describe your centre? Our centre delivers excellent clinical outcomes despite performing complex, cutting-edge procedures. We have approachable staff, make a great team and provide excellent, high-quality training

Number of times the centre has participated in EuroPCR: More than 10 times

“We very much enjoy being part of the PCR family and working together to provide the best patient care”



Toulouse, France
Clinique Pasteur

Centre established in 1957

Practitioners include about 200 practitioners (including 45 cardiologists and cardiac surgeons) and 1,250 employees (around 900 of whom are paramedics)

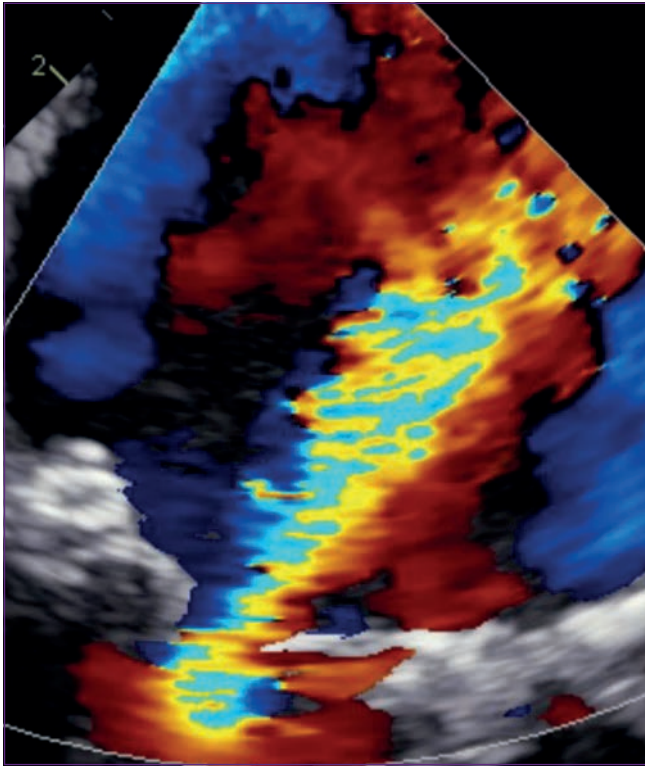
Most frequent types of interventions/procedures: Around 5,000 coronary angiographies, 3,300 angioplasties (robotic-assisted or not) and 1,000 structural heart disease treatments (aortic, mitral and tricuspid) per year

How would you describe your centre? We are a leading cardiology centre offering excellence, innovation and ethical standards to its patients. Clinique Pasteur has long-lasting expertise in cardiology and benefits from adopting a multidisciplinary approach to patient care using latest technologies

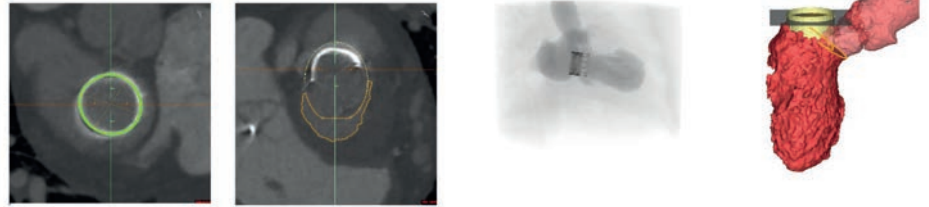
Number of times the centre has participated in EuroPCR: For as long as EuroPCR has existed – each year since 1989!

“From the beginning to 2022, from Professor Marco and Dr Fajadet to the next generation, we are excited and grateful to be part of EuroPCR, the world-leading course in interventional cardiovascular medicine. It is our way to raise, enhance and share our experience”

LIVE CASES TODAY!



London, United Kingdom



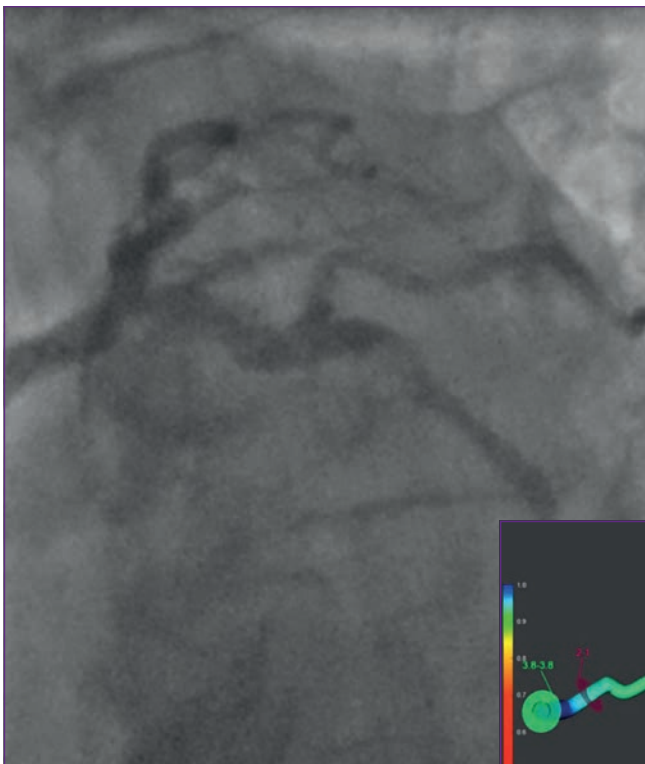
There are three LIVE cases today in the Main Arena, including a demonstration of a mitral valve-in-valve from St Thomas' Hospital by operators, Tiffany Patterson, Bernard Prendergast and Simon Redwood.

Mitral valve-in-valve: LIVE case from St Thomas' Hospital - London, United Kingdom

Main arena, 10:30 – 12:00

- What are the options for treating degenerated mitral bioprostheses?
- What are the considerations before implanting mitral valve in valve?

Come and find out!



Toulouse, France

Later in the afternoon, Bruno Farah and Didier Tchétché will perform a live PCI for a severe calcified lesion, streamed from Clinique Pasteur.

PCI for severe calcified lesions: LIVE case from Clinique Pasteur - Toulouse, France

Main arena, 14:45 – 16:15

- How should you approach these kinds of lesions?
- What is the backup plan?
- When was the last time you used a Rotablator?

DON'T MISS TODAY'S OTHER LIVE CASE

Role of OCT in multivessel PCI: LIVE case from Clinique Pasteur - Toulouse, France

Main arena, 08:30 – 10:00

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- All-comer HBR population, including acute coronary syndrome and complex PCI
- Supports reduction of DAPT to 1 month in HBR patients treated with Ultimaster™ family DES*

TOOLS AND TECHNIQUES

May 18, 12:15 - 13:45 | Théâtre Bordeaux

Left main and complex bifurcation PCI in high bleeding risk patients

Anchorperson: **T. Cuisset** | Moderator: **G. G. Toth**

PUSHINGBOUNDARIES



IS1224GB10211MVIII

¹ Dual Antiplatelet Therapy after PCI in Patients at High Bleeding Risk. Valgimigli M et al. N Engl J Med. 2021;385:1643-1655

* MASTER DAPT included patients at high bleeding risk who had undergone implantation of Ultimaster™ family stent; results may not extend to patients who are not at high bleeding risk or who receive other stent types.

HBR: high bleeding risk; DAPT: dual antiplatelet therapy; PCI: percutaneous coronary intervention; DES: drug-eluting stent

MASTER DAPT study is sponsored by the European Cardiovascular Research Institute (ECRI, Rotterdam, The Netherlands) and supported with a restricted research grant by Terumo Europe. Ultimaster™ Tansei™ and Ultimaster™ DES are not available for sales in all countries. Please contact your Terumo local sales representatives for more information.

PICK OF THE DAY, BY YOUR PEERS

Your colleagues share their top session choices taking place today!



We asked different heart team members from various professional backgrounds to tell us which sessions they are really looking forward to today and why.

With so much to choose from, who better than your peers to advise on which sessions to participate in?



Anne Bellemain-Appaix

*Interventional cardiologist
Antibes Hospital - France*

Innovations in coronary physiology

Room 251, 08:30 – 10:00

This session will give a good understanding and raise awareness of innovation in the microvascular fields, including quantitative flow ratio, coronary flow reserve, radial wall strain, real-time microvascular detection and treatment, assessment of microvascular resistance by computational approach, its reserve and study in angina with no obstructive coronary artery disease, and a new approach in microvascular dysfunction management. The session may be particularly appealing to interventional and non-interventional scientists interested in microvascular function.

The cathlab of tomorrow... already here today

Theatre Bordeaux, 10:30 – 12:00

For all curious individuals and physicians who want to take part in the future, this session is ideal for increasing awareness of: the growing part of artificial intelligence in cardiology to improve knowledge, safety and decision making; the latest developments in robotic PCI, for whom, when, and for what; and the proctoring capability of augmented reality.

How to use coronary CT imaging and physiology for multivessel disease

Theatre Bordeaux, 14:45 – 16:15

This session will be invaluable to understanding how physiology assessment and CT imaging can help you to plan, realise and optimise your PCI in multivessel disease patients. Cardiologists and surgeons especially may be interested to learn about the CT-guided PCI project, CT-fractional flow reserve and the fast-track coronary artery bypass graft trial.

Late-breaking trials on TAVI

Room Maillot, 14:45 – 16:15

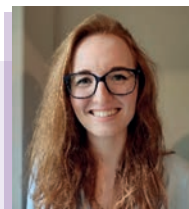
This session provides scientists and interventional cardiologists or surgeons that are interested in recent data on TAVI with all they need to know about TAVI late-breaking trials and recent solutions to everyday problems: prosthesis-patient mismatch following TAVI, outcomes of myocardial revascularisation completeness in TAVI patients, stroke complicating TAVI, predictors of mortality after successful transcatheter aortic valve replacement (GALILEO), balloon versus self-expanding valves in valve-in-valve TAVI, JenaValve Trilogy for treatment of aortic regurgitation, pacemaker implantations and left

bundle-branch block (SCOPE 2 subanalysis). All presentations and discussions will be conducted by experts in the field.

Embrace the innovation in PCI and TAVR: Robocath R-One vascular robot for PCI in China, MicroPort Firehawk TES stent and VitaFlow valve

Room 242A, 16:30 – 17:30 (sponsored by MicroPort)

As the title suggests, innovation is progressing, and this session will discuss three growing technologies from MicroPort: 1. The PCI Robot R-ONE for assisted coronary and vascular angioplasty and stenting, with in-human results available; 2. The Firehawk cobalt chrome sirolimus-eluting stent, with a biodegradable polymer, which was compared with the Xience stent in several studies and had already CE approval; and 3. the VitaFlow bovine aortic valve for TAVI, with a 16–18F femoral access and flexible delivery system. This is an opportunity for all interventional cardiologists, economists or administrative staff to deal with what will probably be cost-effective Chinese technical propositions.



Judit Andréka

*Interventional cardiologist fellow
Hungarian Defense Forces Military Hospital - Budapest, Hungary*

As a young cardiologist, it was really challenging to pick just five sessions from this rich and versatile programme to recommend to the EuroPCR audience. It is going to be a memorable day, so tailor your choice according to your needs and enjoy EuroPCR 2022!

Planning treatment strategies in multivessel disease – Day #2 Seminar #2

Room 241, 08:30 – 10:00 (EAPCI-PCR Fellows Course Programme.
For pre-registered participants only)

Today's programme includes sessions proposing interesting challenges in multivessel disease and complex PCI. This session is a case-based discussion focused on building revascularisation strategies in multivessel disease using not only angiograms but also functional assessment and intravascular imaging. Members of the EAPCI-PCR Fellows Course Core Team, for example, Salvatore Brugaletta and Dejan Milasinovic, will provide clear messages and unique tips and tricks on how to use these different modalities to achieve the best outcome.

How to select the appropriate device for calcified lesions?

Room Learning, 10:30 – 12:00

Interventional cardiology is one of the most evolving fields within cardiovascular medicine. The best example of this is how we treat severely calcified lesions.

Over the past 40 years, from the simple balloon angioplasty through rotational atherectomy and intravascular lithotripsy, interventional cardiology has reached the point where there is almost always a solution for every non-dilatable calcified lesion. The use of traditional or new dedicated devices for the treatment of calcified lesions allows better lesion preparation, and so it is important that we know the different mechanisms and technical features of these devices. This session will give an excellent summary of the specifications and indications of these modalities.

Complex PCI: challenges and solutions

Room 253, 10:30 – 12:00

One of the best things in EuroPCR is the collaboration between different nations and the possibility to build new international connections. This morning's session is an excellent example of this type of cooperation, where the Interventional Working Group of the Hungarian Society of Cardiology and the Association of Interventional Cardiology of the Spanish Society of Cardiology will present several astonishing and challenging PCI cases with unusual solutions, using different imaging modalities, lesion preparation techniques and chronic total occlusion recanalisation modes.

The right valve choice for TAVI patient longevity and durability

Room Maillot, 12:15 – 13:45 (sponsored by Medtronic)

As indications for TAVI are emerging, especially concerning the age of patients, it is crucial to be aware of the durability data of the current TAVI platform. This session will focus on contemporary implantation techniques and procedural goals aimed at decreasing the incidence of valve degeneration and improving patient survival.

Learnings from an optimised TAVI patient's journey

Studio Havane, 16:30 – 17:30 (sponsored by Edwards Lifesciences)

Participants who have an interest not only in performing TAVI procedures but also in managing TAVI patients will certainly look forward to this session.

It will discuss everyday problems, such as finding the appropriate time to refer a patient with aortic stenosis, the importance of the Heart Valve Team, and the optimised peri- and post-TAVI procedural steps needed to achieve excellent clinical results and quality of life.



Karen Wilson

Senior Nurse
Guy's and St Thomas' Hospital - London, UK

TAVI durability: important considerations for patient lifetime management

Studio Havane, 08:30 – 10:00

The durability of a TAVI prosthesis has been a topic of discussion since the procedure was implemented. This case-based session, a must for all members of the multidisciplinary TAVI team, will cover considerations for both TAVI and surgical aortic valve replacement prostheses, which are especially important as we move to implant more TAVI devices in younger, lower-risk patients. From personal experience of working with two of the speakers, Olaf Wendler and Vinayak Bapat, I know they will impart their extensive experience and expertise through interesting cases.

Mitral valve-in-valve: LIVE case from St Thomas' Hospital - London, UK

Main Arena, 10:30 – 12:00

I may be biased in recommending this session as it is live from my hospital! St Thomas' is a very experienced live-case centre, and the work required to perform these procedures safely is a true team effort for doctors, nurses and allied professionals (NAPs). You will be able to observe the detailed imaging preparation required to ensure the suitability of a patient for a mitral valve-in-valve, thus increasing your understanding of patient selection. This session is a must for all structural interventional cardiologists, imaging cardiologists and NAPs.



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Managing acute coronary perforation: a simulation-based team approach

Studio Havane, 10:30 – 12:00 (made available thanks to the in-kind support of Mentice)

The key to successfully dealing with an emergency, such as a coronary perforation, is preparation, planning, training, teamwork and learning from past experiences. This simulation case-based session, which is essential for all members of the team involved in coronary intervention, will demonstrate the strategies that should be used when such emergencies occur. If you learn as a team, you work as a team and this highlights the importance of team simulation/roleplay sessions.

What's new in 2022

Room 252B, 10:30 – 12:00

This session will provide important updates on the main changes in the recently updated guidelines for ACS (ESC) and valvular heart disease (ESC/EACTS).

I hope that it will also give tips on how to overcome barriers to implementing new guidelines. The COVID-19 pandemic required a major effort for all involved. This session will recognise this and show how team adaptability was vital to comply with the constantly changing guidance in-patient pathway management and personal protective equipment.

Acute coronary syndrome: are women really so different?

Room 252B, 14:45 – 16:15

There have recently been a number of published papers highlighting that women are different when it comes to the presentation of ACS. It is vital that we are all educated on these differences so we can ensure we are interpreting and treating patients correctly. This session also hears from the most important person in the cathlab – the patient – and will allow practitioners to understand what it really is like to be a female patient. The session is specifically targeted at NAPs, but learning opportunities are available for all.



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**Sabine Bleiziffer**

Cardiac surgeon
Heart and Diabetes Center North-Rhine Westphalia
- Bad Oeynhausen, Germany

TAVI – real world outcomes

Room 242B, 08:30 – 10:00

This session will present data on head-to-head valve type comparisons, which are important to support individual prosthetic valve choices. Outcomes in specific patient populations, e.g. with small annulus or with low-flow stenosis, are essential for discussions on refining indications for intervention versus surgery. In addition, detailed implantation techniques, such as commissural alignment or oversizing, will be presented. These small additional details can maximise results after TAVI, including consideration of lifetime management of patients with aortic valve disease.

Optimal technique for valve-in-valve TAVI

Room Maillot, 10:30 – 12:00

I would like to recommend this case-based session about valve-in-valve treatment, in which I am involved as a discussant. The new 2021 guidelines on heart valve disease upgraded valve-in-valve TAVI to a grade IIa indication. Dan Blackman, several highly experienced interventionalists and myself, as a cardiac surgeon, will discuss all aspects of valve-in-valve therapy. Starting from what you need to know about the technical details of surgical bioprostheses and demonstration of the available apps for valve-in-valve choices, we will then go step by step through one case. Discussion about coronary protection with several techniques and about lifetime management, including the role of surgery, will complete the session.

A case of interventional tricuspid valve replacement

Room 252A, 10:30 – 12:00

Interventional tricuspid valve therapy is in its infancy. In this case-based session, Azeem Latib and Edwin Ho, leading experts in this field, will present important clinical, imaging and technological details for heart-team discussions. This session may be of interest to participants aiming to get an update on the currently available interventional options for tricuspid valve treatment and who would like to understand how to select a patient for these innovative therapies.

TAVI: are there still complications?

Le Louvre Case Corner, 14:45 – 16:15

While most severe complications have become rare during TAVI procedures, some are still not fully understood and cannot be fully avoided, such as stroke or a suicide ventricle. These and other cases are discussed in this clinical case session. Learning from cases is learning from other experts how an emergent rescue manoeuvre can be carried out in a difficult situation. Case discussions may also help to raise awareness and anticipate complications in an individual patient.

Transcatheter mitral valve replacement

Room 252A, 14:45 – 16:15

The much slower adoption of interventional mitral valve replacement compared to interventional aortic valve replacement is now picking up steam. I recommend this case-based session to all participants wanting to understand the selection process of edge-to-edge versus interventional mitral replacement versus surgical mitral repair or replacement. With a strong focus on imaging, the session will discuss which patients are best suited for which therapy and which parameters are necessary for imaging evaluation to achieve a perfect result without complications. With David Hildick-Smith and Stephen Worthley as discussants, this session is expected to illuminate all the details of interventional mitral technology and clarify the importance of this therapy in the overall context of mitral valve treatment.

Get the most out of EuroPCR 2022 together as a heart team!

Session Spotlight:

THE CATHLAB OF TOMORROW... ALREADY HERE TODAY



Christopher Cook

*Interventional cardiologist / Cardiologist
The Essex Cardiothoracic Centre – Basildon, United Kingdom*

This morning, delegates will be given the chance to learn all about the innovation and technology that is transforming the way interventional cardiology is practised.

“Essentially, all interventional cardiologists are innovators – we want to continually drive practice forward,” says Dr Christopher Cook, anchorperson of a session entitled “The cathlab of tomorrow...already here today”. “As doctors, we can do that through the procedural aspects of our interventions, but in parallel to that, we have seen considerable progress on the technology side. There has been the translation of a number of innovations into our everyday clinical practice over recent years, with the gradual and seamless introduction of technological advances into the existing cathlab environment. This allows doctors to focus even more on procedural excellence and obtaining optimal long-term outcomes for our patients.”

Perhaps the biggest current driver of innovation, which will be covered in today’s session, is artificial intelligence (AI). “Addressing concerns head-on, there is an understandable degree of mistrust surrounding AI and its role in patient management,” says Dr Cook. **“It is not a replacement for the doctor when it comes to clinical decision making or patient care. Instead, AI can be used to great effect as an expert-level interpretation or additional opinion for the operator/physician.** This approach is analogous with the Heart Team approach we are increasingly aiming to deliver our patients.” The session will discuss the use of AI to interpret intracoronary imaging, particularly optical coherence tomography, as well as its role in monitoring complex data streams, such as invasive haemodynamics, and how it can automate certain safety aspects of procedures. “In effect, **AI allows every cardiologist access to expert-level interpretation,** which can ultimately help to guide precision PCI practice,” explains Dr Cook.

The session will also look at **robotic PCI procedures, a field that is constantly and steadily innovating** to the point where more complex procedures can now be performed by robotics. According to Dr Cook, “This technology is really important for reducing long-term radiation exposure for operators – a clear goal we’re all working towards. In addition, with time, we will have the capability to reliably perform procedures remotely and this opens the opportunity to extend levels of excellence globally.”

Multimodal imaging and fusion imaging are also transforming the care we can deliver in the cathlab. “We are taking on increasingly complex procedures, which all involve an appreciation (and mental reconstruction) of complex 3D anatomies from limited, grey-scale 2D fluoroscopy. Technologies that seamlessly fuse 2D images with the 3D planning images should not only improve our understanding of anatomies but also increase our procedural success.” Last, but

far from least, the session will be showcasing augmented reality, that can allow operators to have remote procedural support from experts and proctors.

“Technological advances already entering the cathlab will lead to the globalisation of excellence and will open up transformative cardiac procedures to patients across the world,” concludes Dr Cook.

DON'T MISS

The cathlab of tomorrow... already here today

Wednesday, Theatre Bordeaux, 10:30 – 12:00

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Thomas Cuisset

Medical Director, PCR Webinars
APHM Hôpital La Timone Adultes - Marseille, France

When Professor Thomas Cuisset became Medical Director of PCR Webinars in December 2019, he did not realise quite how important digital learning would become to the PCR community. We asked him to tell us more about PCR Webinars and their place in the PCR learning continuum.

What are the main objectives of PCR Webinars?

PCR Webinars are aimed at post-graduate practitioners with different levels of experience. This free resource is designed to give **practical, logical and step-by-step advice to inform daily practice**. We also think that by offering continuous interactive education within the community, we are providing a way of keeping people connected together.

When physical meetings stopped due to the pandemic, PCR Webinars were the major source of education. Now that we are able to meet in person again and share best practices, **PCR Webinars complement our face-to-face interactions**. However, we know that it is still difficult for some members of the community to attend international meetings and PCR Webinars serve as a way of bringing education to them, to broaden outreach.

Participants in live supported PCR Webinars may also **claim CME credits** from the European Board for Accreditation in Cardiology. And the added value of the webinar is that if you are unable to participate in real-time, you can also replay the webinar when it is convenient for you, from wherever you are.

How is the content of PCR Webinars devised?

Modules and series are carefully constructed with the help of an **experienced expert team of 'online proctors'** who create the content from scientific evidence blended with their own experiences and insights. During the early months of the pandemic and with the 'digital fatigue' felt by many, we learned a lot about what works and does not work in terms of engaging the audience.

The majority of PCR Webinars are released as a series on a particular topic, and comprise a certain number of modules that are broadcast over a period of several weeks or months. A large proportion of webinars are independent and have been fully developed by the PCR Core Scientific Team. In addition, thanks to generous support from industry, we have supported PCR Webinars, which are backed by unrestricted grants from our partners, and also fully sponsored PCR Webinars.

It was an **unrestricted grant** that enabled us to put together something a little different last year – PCR Webinars on the Road. Hosted by Dejan Milasinovic and Chiara de Biase, this **digital world tour visited centres of excellence** across the globe to gain insight from renowned practitioners on specialist topics, such as how to treat the left main in a patient with ACS and treating patients with diabetes and diffuse disease.

What is the synergy between PCR Webinars and PCR Courses?

I think the relationship between PCR Webinars and PCR Courses works both ways. People who participate in a webinar and want to know more about a certain topic may then attend sessions on that topic at a PCR Course. Or they might attend EuroPCR and want to delve deeper into a certain area by checking out our library of webinars. For example, participants in this morning's case-based discussion on TAVI durability (Studio Havane, 08:30 – 10:00) may find our recent series on optimising TAVI patients' journey a useful supplement.

If there are any topics that you would be interested in learning about, please do let us know. PCR is listening and ready to create a programme by and for you.

Visit pcronline.com/Webinars to find out more



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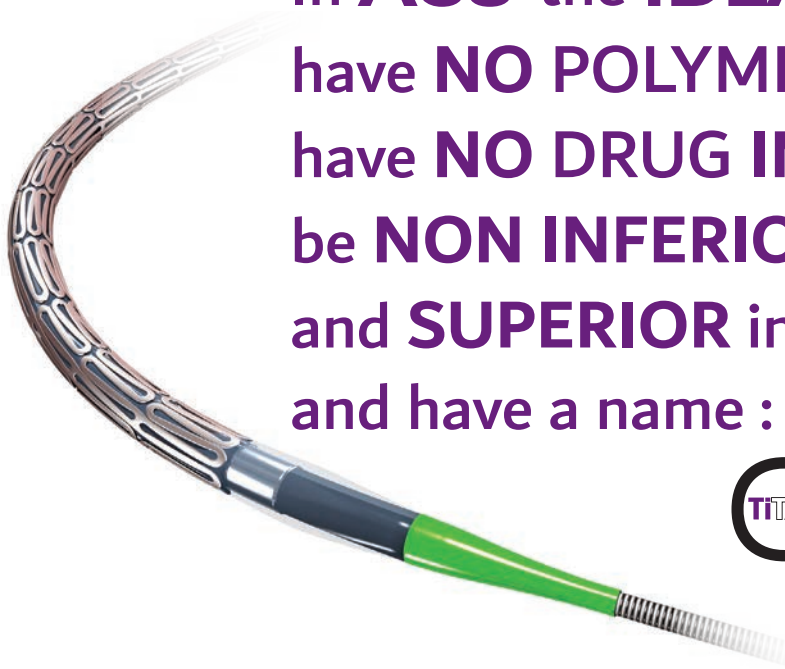
Whatever your speciality in interventional cardiology, you'll find **PCR Webinars** to meet your educational needs!

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**OP
YOUR**

STEMI/NSTEMI

In **ACS** the **IDEAL STENT** should :
 have **NO POLYMER**,
 have **NO DRUG IMPAIRING HEALING**,
 be **NON INFERIOR** in **EFFICACY**
 and **SUPERIOR** in **SAFETY** vs. **DES**,
 and have a name :



TiTAN OPTiMAX*
TITANIUM-NO COATED BIO ACTIVE STENT

**TiTAN
vs.
Xience V**

EuroIntervention 2012 ; 306-315
 International Journal of
 Cardiology 222 (2016) 275-280

EFFICACY

MACE @12 MONTHS

TiTAN™: 9.6%
 vs.
XIENCE V™: 9.0%
 P_{non-inferiority} = 0.001

+

SAFETY

COMPOSITE @5 YEARS
 (Cardiac Death or MI)

TiTAN™: 8.1%
 vs.
XIENCE V™: 12.7%
 P_{superiority} = 0.041

**TiTAN Optimax
vs.
Synergy**

JACC Cardiovascular
 Interventions VOL 13, NO 14,
 2020

MACE @12 MONTHS

OPTiMAX™: 6.3%
 vs.
SYNERGY™: 7.0%
 P_{non-inferiority} < 0.001

+

COMPOSITE @18 MONTHS
 (Cardiac Death, MI or Major bleeding)

OPTiMAX™: 3.7%
 vs.
SYNERGY™: 7.8%
 P_{superiority} = 0.001

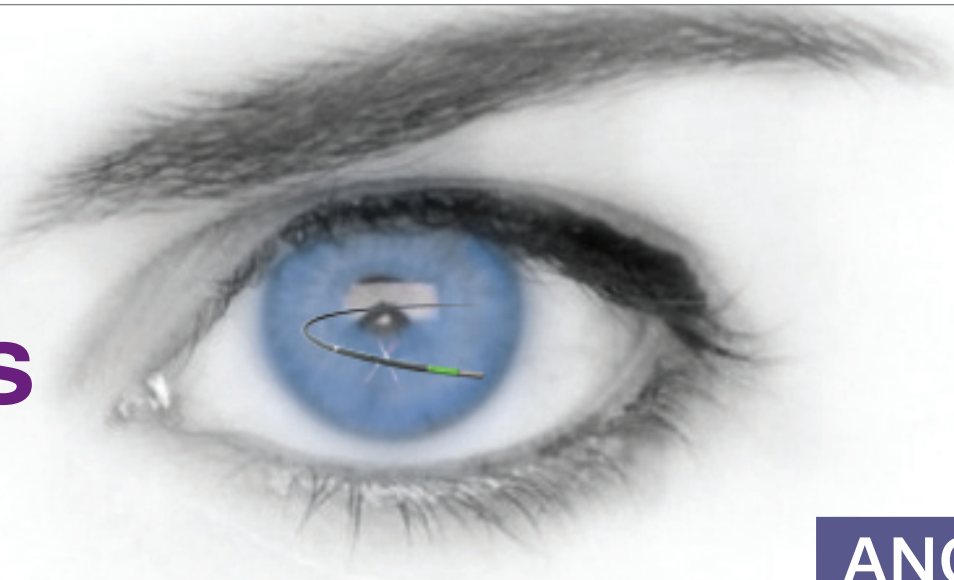


HEXACATH

GAME CHANGER IN **MI** ASSESSMENT & TREATMENT

*** available**

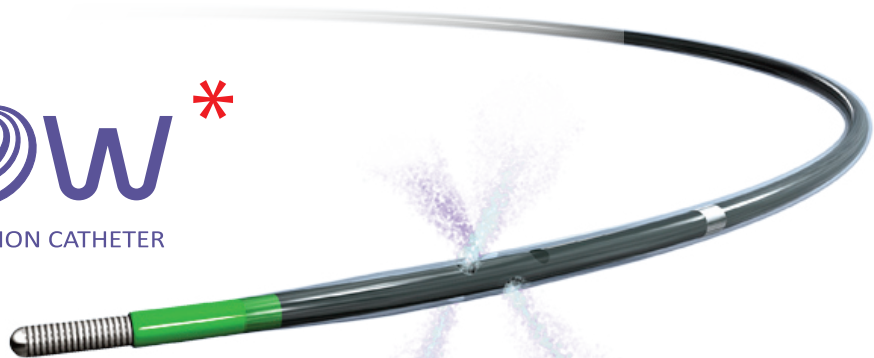
**EN
EYES**



ANOCA/MINOCA

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Happy Birthday TAVI

20 YEARS OLD THIS YEAR!

Twenty years ago, surgical aortic valve replacement (SAVR) was the only real option for patients with symptomatic aortic stenosis, and if the patient was considered at high operative risk, alternatives were very limited.

The advent of percutaneous balloon angioplasty in 1977 was the first major step in the development of transcatheter aortic valve interventions. Then, in 1986, the first-in-man balloon aortic valvuloplasty (BAV) was performed for calcific aortic stenosis by Alain Cribier in Rouen, France.¹ Henning Rud Andersen carried out the first transcatheter implantation of an artificial aortic valve in pigs in 1992² however, the idea of implanting a balloon-expandable stented valve into diseased aortic valves in humans was met with much scepticism.

Four years later, real progress was made when Cribier joined forces with engineers Stan Rabinovich and Stanton Rowe, and then with Martin Leon, a cardiologist who was working on coronary stents. Together they founded Percutaneous Valve Technologies (PVT), and over the next 6 years, they created and tested various prototypes of transcatheter valves. Successful preclinical studies were conducted in sheep in collaboration with H el ene Eltchaninoff, but whether the technique would work in calcified

human aortic valves was still unknown. However, **after many iterations and technical developments, Cribier and Eltchaninoff performed the first-in-man transcatheter aortic valve implantation (TAVI) on 16 April 2002.**³ Here, they tell us more about that very first procedure and the benefits that TAVI has been bringing ever since.



Alain Cribier

*Interventional cardiologist /
Cardiologist
University of Rouen-Charles Nicolle
Hospital - Rouen, France*



H el ene Eltchaninoff

*Interventional cardiologist /
Cardiologist
University of Rouen-Charles Nicolle
Hospital - Rouen, France*

Although we were nearing the end of the preclinical work by the spring of 2002, we did not feel completely ready for the first human case. But we were presented with a 57-year old patient with critical aortic stenosis, in cardiogenic shock, with an LVEF of 12%, who had been declined by three cardiac surgery teams due to multiple comorbidities. BAV had failed, and

performing the first TAVI appeared to be the only option to save his life. The decision to proceed was difficult – we wished we had the perfect patient for the first procedure – but it was his only hope.

Our methods on the day were rather improvised. We had built TAVI around a transfemoral approach and we needed to use a transeptal route in our first case. Thankfully, none of the potential problems that we had considered occurred. We knew that if the heart was still beating immediately after the implantation, then we had succeeded. Indeed, within minutes, the patient’s blood pressure was returning to normal and his grey complexion turned a healthy pink colour. The elation that we felt was incredible and we eagerly relayed our success to the rest of the PVT team, having a sleepless night in the US. After so many years of hard work, the consequences of failure would have been devastating. We had faced an uphill battle to get to this stage, but we knew there was a huge clinical unmet need; we trusted in our idea and our perseverance paid off. You can either give up or you can find solutions and that is what we did.

Since then, the progress made with TAVI has been dramatic. It has been estimated that around 1.5 million patients in over 70 countries have had TAVI and experienced the benefits compared with surgery. **Patients are now discharged in great shape after 1–2 days** and there are also advantages in terms of reduced staffing requirements, reduced critical care hospitalisation and rehabilitation, and much shorter hospital stays.

A main driver behind the rapid uptake of TAVI is the wealth of scientific evidence that was quickly generated from numerous large-scale clinical trials and real-world registries, including the FRANCE registries. **High-quality data continue to provide insights into how, when and why we should use TAVI.** Martin Leon coined the term ‘structural heart disease’ when our research was in its infancy. **TAVI opened up structural heart disease interventions,** not only for aortic valves but also now for the non-invasive repair and replacement of mitral valves and more recently, tricuspid valves. Furthermore, novel technologies are emerging, such as valve lithotripsy. We cannot talk about the development of TAVI and innovative valve technologies without stressing the importance of teamwork – **we found great partners, not only in the clinic but also in industry,** and it was our collaborative endeavours that have got us this far.



Alain Cribier and the first patient with TAVI, Rouen, 16 April 2002



**PVT founders
– Martin Leon,
Alain Cribier,
Stanton Rowe,
Stan Rabinovich
– at TCT 2010**



Rüdiger Lange
Cardiac surgeon
Deutsches Herzzentrum München
- München, Germany

Surgeons cannot deny the benefits of TAVI! It is much less traumatic and invasive than SAVR as it does not need chest opening and extracorporeal circulation. Accordingly, complications are rare and there are no visible scars with TAVI. In the light of recent studies, strokes and cognitive impairments also seem to be less frequent with TAVI than with SAVR. In addition, the hospital stay and recovery period are much shorter than after a surgical procedure and I am convinced that outpatient TAVI will be used in most patients in the future.

So **TAVI has already changed surgical practice considerably and looking ahead**, I think all patients with isolated aortic valve disease, regardless of their procedural risk, will be treated with TAVI. But there are still numerous procedures left for cardiac surgeons to perform and **we welcome any other innovations** that make surgery and its potential complications even less frequent.

There are many sessions on TAVI-related topics at EuroPCR 2022, including late-breaking trials on TAVI this afternoon. Tomorrow, in a tutorial entitled ‘The future of TAVI’, Hélène Eltchaninoff, Alain Cribier and other pioneers will discuss the originality of the concept and the potential of TAVI as a default strategy in all patients. And don’t forget the LIVE TAVI case tomorrow morning from our neighbours at the Institut Cardiovasculaire Paris Sud!

1. Cribier A, et al. Lancet. 1986;1:63–67.
2. Anderson HR, et al. Eur Heart J. 1992;13:704–708.
3. Cribier A, et al. Circulation. 2002;106:3006–3008.



Stan Rabinovich
Co-Founder of PVT and former
VP of Advanced Technology of
Edwards Lifesciences

The bottom line is that TAVI was and is revolutionary in medicine. At PVT, we all dreamed of a technology that just might save the lives of non-surgical patients and improve their quality of life as well. However, the challenges seemed almost insurmountable; animal trials were routine failures, creating a durable expandable and collapsible valve had never been done before, plus selecting the right materials, catheters, assembly techniques and then developing a procedure were challenging, to say the least.

The standard of care, SAVR, was remarkably advanced. Surgeons told us that there was no such thing as a ‘non-surgical patient’, as they did surgery on nonagenarians! Furthermore, they said that stenting open aortic stenosis was impossible, and even if you tried, every patient would have a stroke from the debris and the valve would not be retained without sutures. These were all legitimate concerns that had to be addressed in our development. Of course, surgery was not perfect, and many patients were not referred (why would you send a non-surgical patient to a surgeon?). Perhaps the most compelling gap was that so many patients did not go home after surgery, they went to assisted living care.

Every patient wants to go home and feel better, and that was the promise of TAVI that we were chasing.

During the past decade, **TAVI has revolutionised the interventional treatment of aortic stenosis**. Unlike surgical prostheses, the benefit of which has been validated in observational studies and indications for TAVI are now based on the results of multiple large randomised clinical trials covering multiple indications. From the first critical patients in Rouen, whose lives were saved by their remarkable team using first-generation valves, **TAVI has evolved into the standard-of-care treatment** for severe, moderate and low-risk aortic stenosis, irrespective of surgical risk.

The desire to continuously improve the product and procedure has driven development. Edwards’ Sapien valves are still based on the PVT valve, but the technological advances are amazing. **The TAVI revolution continues** with the miniaturisation of valves and delivery systems, the development of new closure devices, and the availability of different prosthesis sizes and numerous accessories to make the procedure safer and more effective. Innovation is costly, but new developments and indications are making TAVI procedures more economical.

Early discharge, a beating heart, no bypass, cathlab-based procedures where patients go home and recover quickly – it was our dream. And 20 years later, it is our dream come true!



First-in-man TAVI: Christophe Tron, Hélène Eltchaninoff and Alain Cribier, Rouen, 16 April 2002

DON'T MISS

Late-breaking trials on TAVI

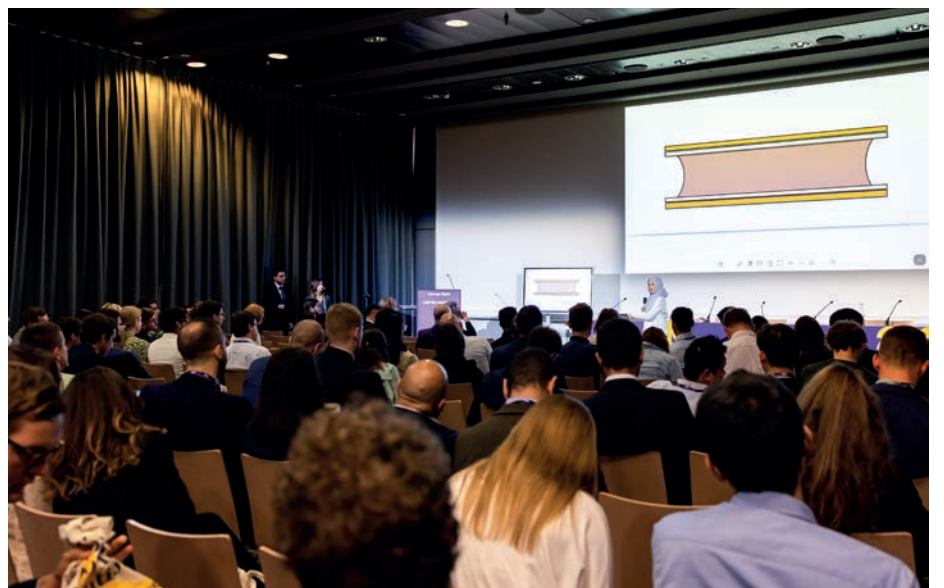
Wednesday, Room Maillot, 14:45 – 16:15

The future of TAVI

Thursday, Studio Havane, 08:30 – 10:00

**TAVI: LIVE case from Institut
Cardiovasculaire Paris Sud
- Massy, France**

Thursday, Main Arena, 10:30 – 12:00



YESTERDAY'S CATCH UP... **EAPCI-PCR Fellows Course**

Day 1 of the EAPCI-PCR Fellows Course got off to a stimulating start yesterday with the first seminar on managing high bleeding risk and a workshop covering common interventional dilemmas.

Explaining the aims of the programme, Dr Gabor G Toth (University Heart Center Graz - Austria) said, "The goal of the Fellows Course is to cover a broad spectrum of different clinical aspects that an interventional cardiology fellow faces when treating patients. This means considering indications, diagnosis, access sites, the different tools and techniques for lesion preparation and treatment, drug strategies, and so on." Instead of traditionally reviewing standalone topics, a case is presented and then patient management is discussed from all perspectives. "After completing the Course, **we want fellows to return to their hospitals with a more solid understanding of interventions based on a patient-centred approach** – not a technical approach or a topic-based approach – and with a global understanding of how to treat individual patients," he commented.

After the official opening of the EAPCI-PCR Fellows Course, yesterday morning's seminar considered the management of a patient with inferior STEMI at high bleeding risk, a typical case that fellows often encounter. Dr Toth presented the case while discussants, Dr Chiara de Biase and Dr Eduardo Infante de Oliveira, provided insights on different aspects, including how to overcome any radial difficulties, when to use thrombus aspiration, indications for nonculprit PCI and the choice of DAPT strategy.

Later in the afternoon, the Course reconvened for the first 'Dilemmas in interventional cardiology' workshop in which fellows brought their own tricky cases and were helped to explore the correct course of action by other participants and facilitators. "These sessions help to improve the fellows' problem-solving skills," noted Dr Toth. "In addition, case presenters are assigned a mentor to help educate them on how to present their case clearly and engage the audience, so we are trying to go beyond teaching skills related only to interventional cardiology." At each workshop, a prominent expert

is on hand to answer any questions from the fellows, and yesterday, Professor Jean Fajadet provided his insights in a lively discussion.

Feedback was certainly very positive after the first day. "I really appreciated the highly interactive 'Course-in-a-Course' format," said Dr Lorenzo Scalia. "The management fundamentals plus the tips and tricks help to enhance my everyday clinical practice. **There is a perfect mix of 'hot topics' for people like me who are beginning our journey into interventional cardiology.**" Another fellow, Dr Judit Andréka commented, "The atmosphere, the speakers, the topics – it was incredible, and I have learned so much already. Online training has really evolved, but **there is a special place for in-person interactions.** I particularly enjoyed the dilemmas workshop – **when I need to make big decisions in the cathlab, I will be able to draw on my experience from these sessions.**"

The EAPCI-PCR Fellows Course continues today and tomorrow, when seminars will cover multivessel disease, bifurcations, calcification and TAVI, and there will be more interventional dilemmas resolved.

YESTERDAY'S CATCH UP.. Focus on the tricuspid valve

Yesterday saw the first two sessions in a series organised by the PCR Tricuspid Focus Group. Established in 2021, their mission is to raise awareness and standards in this often overlooked form of valve disease.

“There is still a lot that we do not know about the tricuspid valve and its interactions with other structures,” says Professor Fabien Praz (Bern University Hospital, University of Bern - Switzerland), “and now that we have the possibility of minimally invasive treatment, the **PCR Tricuspid Focus Group aims to align knowledge and unify practices, with the goal of improving outcomes** for patients who have been undertreated in the past.”

Last year, under the direction of PCR and the supervision of Professor Francesco Maisano and Professor Praz, more than 70 experts from a range of different specialties established five dedicated Working Groups to focus on anatomy and imaging, interventions, outcomes, the patient care pathway and innovation. For each topic, they considered key messages that need to be conveyed to the main stakeholders – the treating and referring physicians, as well as the patients and their relatives.

A state-of-the-art review was published, which proposes a standardised approach to the evaluation of tricuspid regurgitation and discusses available transcatheter therapies, the main criteria for patient and device selection, and existing gaps in knowledge.¹

“The PCR Tricuspid Focus Group is currently in a second phase – **the awareness phase – where our aims are to bring the key messages to the community,** to educate and also to encourage further exchange between specialties and associations,” notes Professor Praz. “Through PCR programmes and Courses, and via local meetings, we want physicians to know that tricuspid valve disease is impacting outcomes, that there are **minimally invasive therapeutic options available** and that it should be treated early.”

As part of this process, a Learning Session took place yesterday at EuroPCR 2022, with Professor Maisano, Professor Praz and imaging specialist, Dr Nina Wunderlich. A key message was the **need for in-depth understanding of tricuspid valve anatomy and morphological abnormalities,** which are essential for procedural planning. In addition, clear communication between the interventionalist and echocardiographer was emphasised.

Later in the afternoon, a case-based session focused on tricuspid transcatheter edge-to-edge repair (TEER). Before the procedure, considerations regarding transthoracic structural evaluation were described, which is needed to identify the mechanisms responsible for tricuspid regurgitation and its quantification. The main indications for TEER were discussed including surgical risk, lack of pre-capillary hypertension and anatomical suitability.

Using a recorded case, Professor Ralph Stephan Von Bardeleben took participants through the steps involved in a two-TriClip procedure that resulted in almost no tricuspid regurgitation in a patient with prior massive regurgitation. An update was provided on the growing body of prospective trial and registry data on TEER and the session ended with a discussion on emerging alternatives to TEER, including tricuspid valve replacement.

The PCR Tricuspid Focus Group series continues today and tomorrow. And for those who still want to learn more, a case-based PCR Webinar series is available, with new webinars expected later in the year, as well as more interesting sessions at PCR London Valves 2022.

1. Praz F, et al. EuroIntervention. 2021;17:791–808.

DON'T MISS

A case of interventional tricuspid valve replacement

Wednesday, Room 252A, 10:30 – 12:00

Edge-to-edge transcatheter tricuspid treatment: who are the good candidates?

Thursday, Room 241, 10:30 – 12:00

2021 EAPCI Fellowship Grants Programme: **Winners**

The European Association of Percutaneous Cardiovascular Interventions (EAPCI) is committed to maintaining a high standard of professional excellence among the entire interventional community at all stages of their career.

This year, the EAPCI offered nine fellowship grants in interventional cardiology, thanks to the financial support from Abiomed, Boston Scientific, Cardinal Health, Edwards Lifesciences, Medtronic and Terumo. It provides an opportunity for a one-year specialised education or clinical training for medical graduates at early stages of their career but before obtaining a permanent, senior staff or consultant position, in an ESC member country other than their country of residence.

The ultimate goal is to enable young candidates to contribute to the enhancement of their country's academic standards upon return as well as encouraging exchanges and interactions from country to country.

The EAPCI Fellowship Committee chaired by Professor Nicolas Van Mieghem and Dr Thierry Lefevre is pleased to announce the 2021 Education & Training Grants winners:

EAPCI Fellowship Grant Programme

- Dr Kamil Bujak from Poland has obtained a fellowship at Hospital Clinic (Barcelona, Spain) under the supervision of Dr Sabate and Dr Brugaletta. The topic of the project is “Training in imaging- and physiology-guided percutaneous coronary interventions.” Supported by Boston Scientific.

- Dr Francesco Fracassi from Italy has obtained a fellowship at Barts Heart Centre, St. Bartholomew Hospital (London, United Kingdom) under the supervision of Professor Mathur. The topic of the project is “Advanced interventional cardiology fellowship.” Supported by Boston Scientific.

- Dr Marcos Manuel Garcia Guimaraes from Spain has obtained a fellowship at St. Antonius Hospital (Nieuwegein, the Netherlands) under the supervision of Dr Swaans. The topic of the project is “Percutaneous interventions for mitral and tricuspid heart valve disease.” Supported by Medtronic.

- Dr Domagoj Markovic from Croatia has obtained a fellowship at University Hospital of Zurich (Zurich, Switzerland) under the supervision of Professor Templin. The topic of the project is “Advanced techniques in complex coronary lesions.” Supported by Terumo.

- Dr Anastasios Alexandros Siskos from Greece has obtained a fellowship at Thoraxcenter, Erasmus University Medical Centre (Rotterdam, the Netherlands) under the supervision of Professor Van Mieghem. The topic of the project is “Advanced coronary interventions, with focus on heavily calcified lesions and new techniques.” Supported by Abiomed.

- Dr Tatyana Storozhenko from Ukraine has obtained a fellowship at Cardiovascular Centre OLV (Aalst, Belgium) under the supervision of Professor Barbato. The topic of the project is “Education and training in interventional cardiology.” Supported by Cardinal Health.

- Dr Maarten Vanhaverbeke from Belgium has obtained a fellowship at Rigshospitalet Copenhagen (Copenhagen, Denmark) under the supervision of Professor Sondergaard. The topic of the project is “Percutaneous Structural Heart Interventions.” Supported by Medtronic.

EAPCI Andersen & Cribier Fellowship Programme

- Dr Mariana Gonçalves from Portugal has obtained a fellowship at Clinique Pasteur (Toulouse, France) under the supervision of Dr Farah. The topic of the project is “Mitral and Tricuspid Interventions.” Supported by Edwards Lifesciences.
- Dr Blanca Trejo Belasco from Spain has obtained a fellowship at Heart Centre Leipzig (Leipzig, Germany) under the supervision of Professor Abdel-Wahab. The topic of the project is “Prognostic impact of mild paravalvular leaks after TAVI: role of videodensitometry.” Supported by Edwards Lifesciences.

All winners will receive their fellowship awards during the EuroPCR 2022 Awards Ceremony on Friday.

On behalf of the EAPCI Board and the EAPCI Fellowship Grants Committee, we would like to congratulate all 2021 EAPCI grants winners on their awards.



EAPCI

European Association of Percutaneous Cardiovascular Interventions

Reaching out to the world – EuroPCR 2022 retains its global connections

In response to the COVID-19 pandemic and travel restrictions, PCR Courses adopted innovative ways to maintain their global outreach, including PCR Hubs and Local Pods.

But why go global? We asked Professor Pedro Lemos, a previous Hubmaster, to share his experiences.

Pedro Lemos

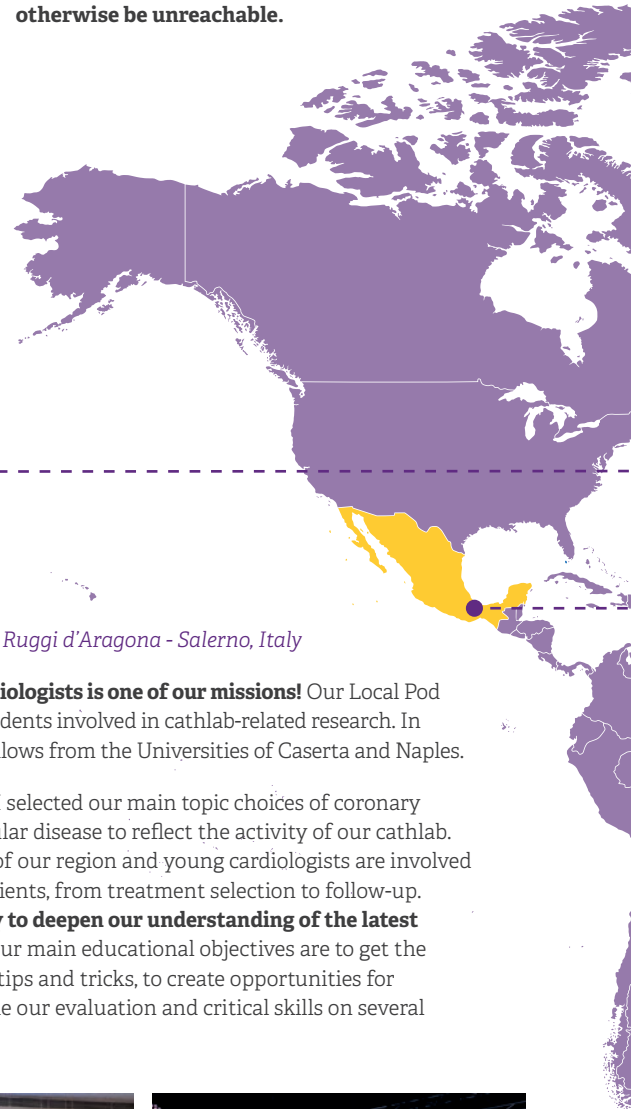
Hospital Israelita Albert Einstein - Sao Paulo, Brazil

Instead of people coming to EuroPCR, EuroPCR came to Brazil in 2021. We reversed the normal flow and also developed our own unique programme – we created a Brazilian EuroPCR, and people loved it!

Because of the time difference, we participated in streamed, live EuroPCR sessions in the mornings and selected highly relevant on-demand recordings for the afternoons. As Hubmaster, I got to take a deep dive into the constellation of sessions available at EuroPCR and chose those I felt were most appropriate for the Brazilian audience. Throughout the day, we enhanced the content with commentary, talks and case presentations from local speakers – all in our native language, Portuguese – which helped everyone to understand and ensured that everyone could join in the discussions. Language can be a problem, but the PCR Hub removed that barrier, and we also had participation from people

who wouldn't travel to Paris, even under normal circumstances.

Although travel is now possible for some, **PCR Hubs and Local Pods provide a complementary function for those not able to come to Paris.** These activities are like branches of EuroPCR – **they spread the word of EuroPCR to places and people that may otherwise be unreachable.**



Sharing the PCR voice with the community at EuroPCR 2022

Like in 2021, local communities have joined EuroPCR 2022 from around the globe. EuroPCR's worldwide reach is being enhanced by Tokyo Live in Japan (supported by Medtronic), as well as a PCR Hub in Chengdu, China. Participants are also joining from Local Pods – in Italy (Varese and Salerno), Bangladesh and Mexico – to follow EuroPCR sessions that meet their group's specific educational needs.

Local Pod, Varese

Battistina Castiglioni

ASST Sette Laghi - Varese, Italy

We were driven to set up a Local Pod in Varese by the desire to offer young cardiologists – in particular interventional cardiologists – the possibility of following what is considered the most important European course on the subject. We also wanted to provide an opportunity for young women cardiologists to participate in the event as they often cannot leave for family reasons.

Our Local Pod was built **to expand knowledge and to help participants learn about tips and tricks with respect to complex PCI and TAVI.** We also wanted to have further insights into the cathlab of the future, given the imminent construction of a hybrid room in Varese.



Local Pod, Salerno

Tiziana Attisano

University Hospital San Giovanni di Dio e Ruggi d'Aragona - Salerno, Italy

Training tomorrow's interventional cardiologists is one of our missions! Our Local Pod includes cardiology residents and PhD students involved in cathlab-related research. In addition, we invited selected cardiology fellows from the Universities of Caserta and Naples.

Fellow Podmaster, Gennaro Galasso and I selected our main topic choices of coronary interventions and interventions for valvular disease to reflect the activity of our cathlab. Salerno is one of the heart valve centres of our region and young cardiologists are involved in the management of these complex patients, from treatment selection to follow-up.

The Local Pod offers a great opportunity to deepen our understanding of the latest thinking in interventional cardiology. Our main educational objectives are to get the views of leading experts, to acquire their tips and tricks, to create opportunities for discussion among colleagues, and to refine our evaluation and critical skills on several interventional cardiology topics.



Local Pod, Dhaka

Afzalur Rahman

Bangla Interventional Therapeutics (BIT) Working Group - Dhaka, Bangladesh

For people who are not able to participate physically at EuroPCR, **we really wanted to offer an opportunity to enjoy the scientific sessions in real-time** from our working group/centre – to meet together and also to gather the latest knowledge and techniques. This relatively new model is a great way to share and learn throughout the world. **The biggest working group of cardiologists from Southeast Asia will join our Local Pod**, and we are excited to participate.

There is so much to choose from in the programme, but we are particularly looking forward to the LIVE sessions, the 'Focus on imaging' sessions, learning more about how to deal with calcified lesions, complex PCI, renal denervation and interventions for structural heart disease, especially TAVI.

Tokyo Live

Kentaro Hayashida

Keio University School of Medicine - Tokyo, Japan

We haven't been able to hold PCR Tokyo Valves since 2020, but **Tokyo Live is an important way of keeping our connection with the rest of the PCR family**. Live from Japan, we will be discussing the procedural steps of CoreValve implantation with a truly international group of session organisers, with the audience in Studio Havane in Paris and with onsite participants from around the world. We will be highlighting the different techniques available and the impact of different patient characteristics, such as smaller body sizes. We hope you will attend Tokyo Live, and we will see you in person at PCR Tokyo Valves in February 2023.

Streamlined TAVI with Tokyo Live @EuroPCR

Thursday, Studio Havane, 10:30 – 11:45

Local Pod, Mexico City

Alejandro Ricalde

CITIC - Mexico City, Mexico

It is very important that we are considered part of the PCR Course in spite of the distance. Our academic entity, **CITIC, strongly believes in the value of continual academic actualisation and the EuroPCR Course supports this aim**. With pandemic and economic difficulties, we decided that the best we could do for our colleagues is to allow them to be part of EuroPCR through the Local Pod. We can live the experience of the Course, exchange concepts and impressions with peers, and stay tuned to the most relevant topics in the interventional cardiology field.

PCR Hubs: Allow exchanges in real-time with Paris and onsite participants. PCR Hubs can organise their own local programme in parallel, adapted to their local needs

Local Pods: In-person gatherings, watching the live-streamed programme together

PCR Hub, Chengdu

Mao Chen

West China Hospital, Sichuan University - Chengdu, China

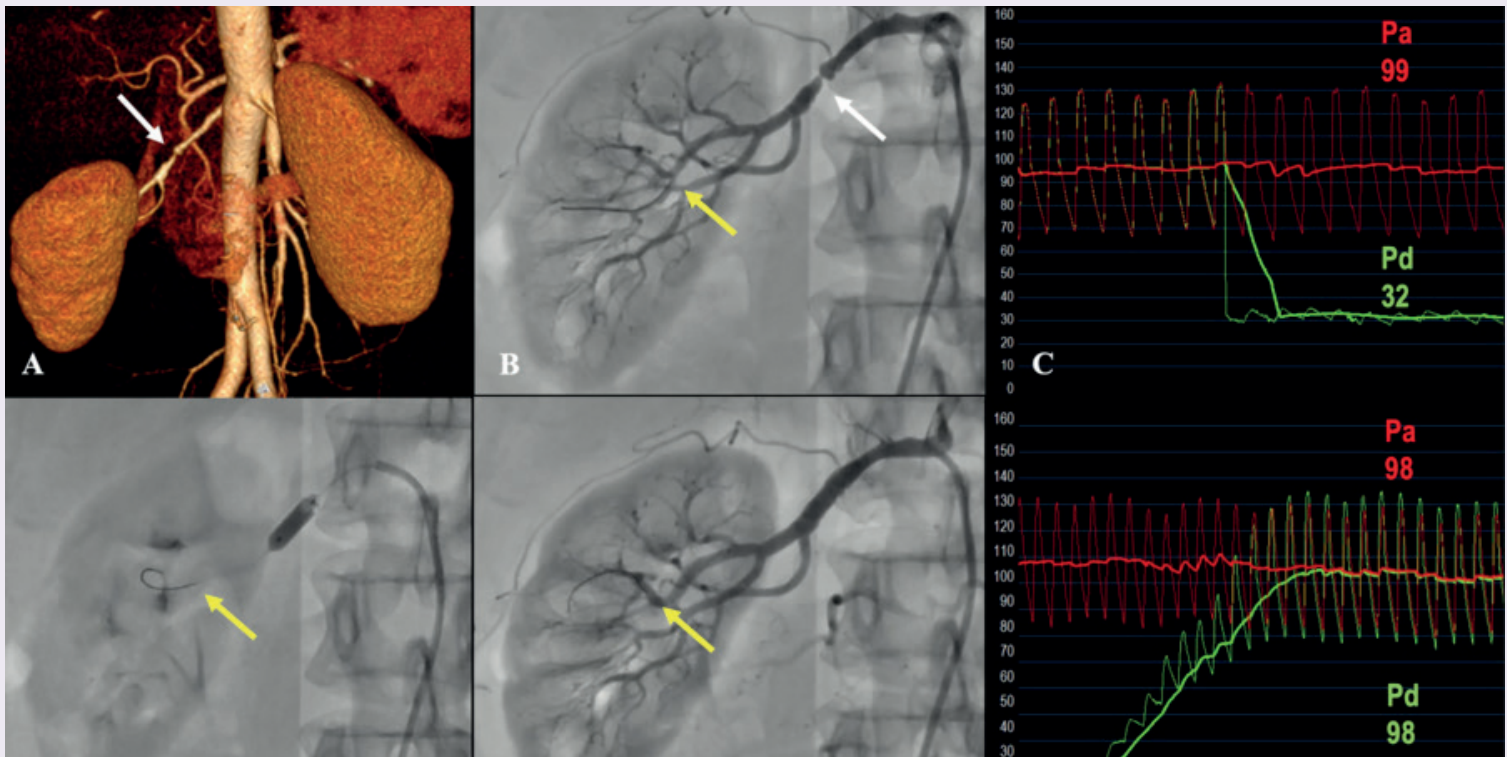
As a PCR Companion, I feel it is my responsibility to contribute to the dissemination of knowledge throughout the community – especially during such a monumental event – by setting up a PCR Hub at EuroPCR 2022. Our centre had the pleasure of participating as a PCR Hub at PCR London Valves 2021, and we both learned and contributed a lot. I believe the sharing process is bidirectional. With accumulating experience with TAVI and transcatheter treatments for mitral and tricuspid valves in China, interventionalists, cardiologists, surgeons, imagers and other valued colleagues have matured into highly specialised heart team members dedicated to delivering the best possible care to our patients.

Our first aim within the Hub is to stay tuned to **late-breaking trials** in this ever-evolving and rapidly changing field. The second is to **enhance our operator skills** through LIVE demonstrations and

more **hands-on workshops**. We should always look for improvements as small changes can make a big difference, especially for high-volume centres. Our third aim is cultural – participating in the Course as a team and ensuring that different members get to **share their area of expertise** helps us to learn more about each other and connects us further.

Offering global connections like PCR Hubs and Pods represents a gesture of support. Also, it signals the restoration of normality. As we enter the post-pandemic era, academic communities are seeking a new framework incorporating traditional onsite and virtual courses. Then there is the fundamental value of the PCR family – together, we go further, wherever we are in the world!

AN IMAGE IS WORTH A 1,000 WORDS



To highlight the importance of imaging in interventional cardiovascular medicine, we've selected some of the most interesting and puzzling images out of those submitted for EuroPCR 2022.

Today's case: 'String of beads' sign

History:

- A 43-year-old woman, with headaches and elevated blood pressure of 210/110 mmHg, was referred for screening for secondary hypertension.
- CTA revealed a small right kidney and multiple calibre variations ('string of beads' sign).

What do you see in this image?

- A. Renal artery stenting
- B. Surgical treatment
- C. Balloon angioplasty only

Answer: C

CTA revealed a small right kidney and multiple calibre variations ('string of beads' sign) in the right renal artery (Panel A), consistent with the diagnosis of fibromuscular dysplasia (FMD). Invasive angiography confirmed the presence of a 62% diameter stenosis by quantitative angiography in the right renal artery (Panel B, white arrow). A pressure sensor-tipped guide wire (yellow arrow) was used to cross the lesion and revealed a trans-stenotic pressure gradient of 60 mmHg with a distal renal perfusion pressure of 32 mmHg (Panel C).

Percutaneous transluminal angioplasty with a single inflation of a 5.0 mm balloon catheter without stenting resulted in immediate normalisation of the renal perfusion pressure. Two months later, blood pressure had normalised without antihypertensive drugs and the diameter of the right kidney had returned to almost normal.

FMD is non-atherosclerotic arterial disease characterised by distorted architecture of the arterial wall. FMD most commonly affects the renal arteries but nearly all arterial beds may be affected, and multivessel involvement is common. In the case of haemodynamically significant renal stenosis, balloon angioplasty often provides excellent results.

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What's new in *EuroIntervention*?



Davide Capodanno

Editor-in-Chief of *EuroIntervention*
University of Catania - Catania, Italy

The current Editorial Board of *EuroIntervention* began their duties in January 2020, at the beginning of the pandemic; however, they have already implemented several changes that help to build on the journal's success.

We asked Professor Davide Capodanno, Editor-in-Chief of *EuroIntervention*, about the current standing of the journal and about the novel features that have been instigated to keep it moving forward.

What makes *EuroIntervention* the go-to journal for intervention manuscripts?

A hallmark of *EuroIntervention* is its unique blend of academic science and practical guidance, a key feature that our readership seems to appreciate, as user numbers, pageviews and downloads continue to increase year by year. **Academically, the journal is strong, with an impact factor of 6.534** – this represents a considerable increase on previous years and takes *EuroIntervention* into the top quartile of interventional cardiology journals and, in fact, into the highest tier of general cardiology journals. *EuroIntervention* is also positioned first among competitor journals for its Altmetric score, which tells us how successful we are in terms of generating attention. So for the complementary measures of academic reach and attention levels, the journal is reaching new heights.

Are there any new features for authors?

When the new Editorial Board was convened in 2020, we put plans in place to **ensure the journal builds on its very solid foundation and continues to evolve to meet the needs of its authors and audience**. Improvements within the editorial team and editors were made to streamline the publication process for authors, including the creation of a time-saving hub to manage submissions more effectively and increased use of digital channels to improve communication behind the scenes.

In 2021, we launched a new Author Centre, which aims to provide clear and simplified instructions on how to prepare a manuscript for submission. In the same place, **we also explain how manuscripts are processed and how decisions are reached as we know authors place a lot of trust in us** when they submit their manuscripts and want to know how they are handled.

We have introduced a new presubmission enquiry capability, which is receiving great feedback. Authors can informally ask the journal if there is potential interest in their manuscript and receive a rapid response. If, for example, an author is unsure if their manuscript is within the scope of the journal, they can submit a 250-word synopsis of the paper and receive an initial response about suitability within 3 days, saving time and effort.

In 2022, we also changed the production process to ensure that Ahead of Print articles are prepared, edited and formatted directly after acceptance, making them rapidly available to readers in the final *EuroIntervention* format.

Are there any new features for the readership?

Our actions for authors ensure that the latest data and articles reach our audience as quickly as possible. **We have also expanded the journal's content by introducing State-of-the-Art reviews.** Intended for a general audience, these free-to-download educational articles address a key clinical topic by reviewing the evidence, identifying areas of uncertainty and providing future perspectives.

We are also excited about our latest offering, **Revolusound**. **Our audience can now keep up to date by listening to audio-augmented content**, such as editorials and abstracts, increasing opportunities to soak up the latest science, whether it be while commuting, exercising or simply as a change from reading.

We have extended our social media presence to reach different audiences. As well as Facebook and Twitter, with its main feed and regular #EIJOnAir live Twitter chats, *EuroIntervention* is now building followers on Instagram.

While we still comprehensively cater for the traditional reader, *EuroIntervention* is much more than a static collection of papers and we hope these new initiatives will help a broader audience make the most of our content.

How does *EuroIntervention* recognise the efforts of its reviewers?

We value our reviewers very highly and to acknowledge their efforts and dedication, we **award certificates** to silver and gold reviewers, based on the number of reviews completed per year. We also recognise our elite reviewers who provide outstanding reviews in terms of quantity, quality and speed and provide a very special award to our **'Best Reviewer'**. In addition, we have developed a career development scheme to recognise talent and help to promote reviewers who would like to progress to become editors.

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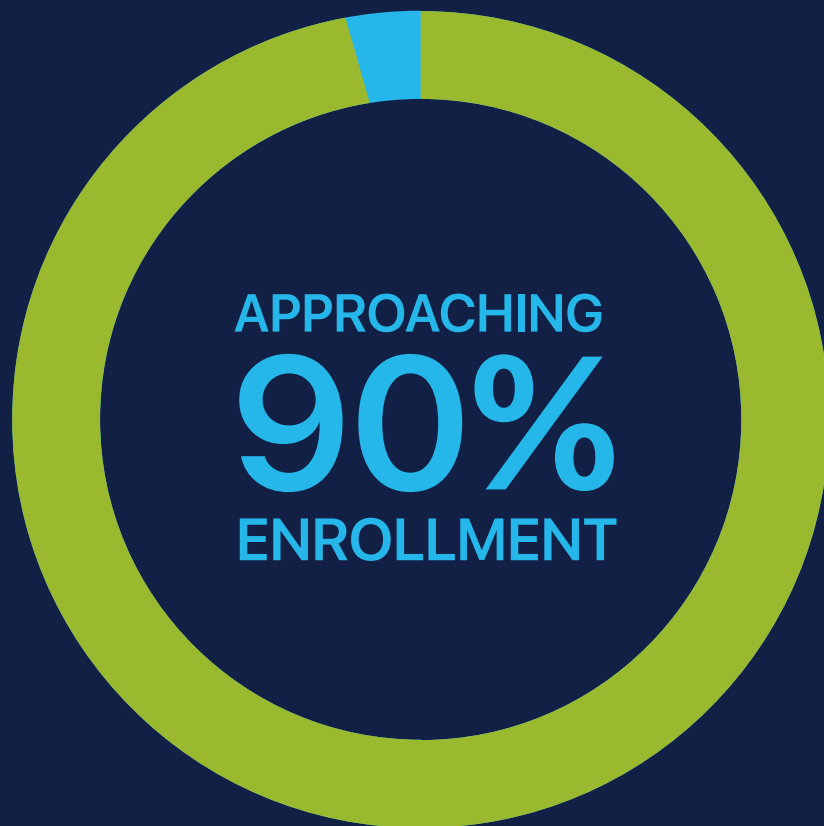
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