

SATURDAY 27 AUGUST

Ready to go for the world's greatest event in cardiology

A congress more interactive than ever before

ESC CONGRESS 2016, the world's largest and most influential cardiovascular meeting, promises to feature world class science that will be more interactive than ever before. Over the next five days 150 different topics will be covered in over 500 sessions attended by over 30,000 professionals from 106 countries.

'We warmly welcome everyone to ESC Congress 2016, held for the first time in the eternal city of Rome,' says Geneviève Derumeaux, Chair of the Congress Programme Committee. 'I think that the ethos of ESC Congress can be summarised by the words of the great Italian film director Federico Fellini. "There is no end. There is no beginning. There is only the infinite passion of life." For me, this shows how all the advances in cardiovascular medicine are based on the tireless work of clinicians and scientists who went before.'

As ever, the big highlight will be original research, with the programme including:

- 28 clinical Hot Line studies
- 26 clinical trial updates
- 24 registry studies
- 12 basic and translational science Hot Lines
- 4594 abstracts selected from more than 11,000 submissions.

'In the Hot Lines we've left time for discussions and reviews by experts on the implications of the trial. We've also arranged sessions around the organisation of care instead of dealing with specific pathologies,' explains Derumeaux.

New for ESC Congress 2016 are the Surgeon, e-Cardiology and Stroke tracks. And, in keeping with the Rome setting, there will be a Gladiators' Arena. 'The idea here is to host interactive battles between leading opinion leaders on controversial issues,' says Derumeaux. 'For the audience it's a great opportunity to hear both sides of the arguments, to ask questions and then vote for their overall champion.'

Another major push this year has been to



Geneviève Derumeaux, Chair of the Congress Programme Committee: 'Giving a greater voice to women represents the reality of today's cardiology departments.'

have more female speakers and chairpersons, who now number more than one-third of invited speakers. 'Giving a greater voice to women represents the reality of today's cardiology departments, where nearly 50% of employees are female,' says Derumeaux.

On Wednesday at the close of the meeting, three Highlight sessions will review the take-home messages from the ESC Congress

starting at 08:30 with basic science session and clinical practice guidelines.

Additionally, shortly after the Congress, ESC TV will broadcast its 'Best Of' programme featuring the ten main topics of the Congress. 'In our new format we will provide much more varied and precise information. It will allow you to get a focused overview from experts,' says Derumeaux.

'The Heart Team' is the Spotlight of this year's Congress

THE SPOTLIGHT OF ESC Congress 2016 'The Heart Team' emphasises the importance of teamwork and interactions between all professionals and specialties involved in treating patients with CVD. Says Geneviève Derumeaux: 'We want to show that for optimal outcomes it's important to have professionals from different cardiology disciplines including nurses, surgeons, and dieticians working together with cardiologists. There needs to be cross talk with everyone, an understanding of what each of the other sub-specialties do and how they can support each other for the benefit of patients.'

Delegates will have a unique opportunity to see the Heart Team in action, with seven sessions based around pre-recorded films featuring teams managing real life cases. Interactions

around aortic diseases have been filmed at Santa Maria University Hospital, Lisbon, aortic stenosis at the University of Liège CHU, athlete evaluation at the Institute of Sport Medicine and Science in Rome, diabetes, dysglycemia and metabolic syndrome at the Hospital Henri Mondor at Creteil, heart failure at the University Hospital Madrid, and stroke at the Hospitals Louis Pradel and Wertheimer, Lyon. All sessions will be held in Forum – The Hub.

'The films will show how difficult cases are managed in the context of a heart team,' says Derumeaux. 'We really want to hear the voice of the patient. These are really interactive sessions and after viewing everyone will be encouraged to question the heart team members on stage about case management.'



Your free access to all scientific resources from the Congress

365

www.escardio.org/365

Discussions and interviews with international experts

ESC TV

www.escardio.org/ESCTV

Don't Miss

09:00 - 15:00	Special Tracks
• General Cardiology for Physicians, Technicians and General Practitioners	Forum (The Hub)
• General Cardiology for Nurses and Allied Professionals	Galileo (The Hub)
• Cardiologists & Surgeons track	Sarajevo (Village 2)
• MY NCS@ESC on 2015 Guidelines & Mini Quizz	The Hub
11:00 - 16:00	Visit the Poster Area, Moderated Posters & Best Posters (12:35 - 13:25) and the Agora for Rapid Fire Abstract Sessions
17:00 - 18:30	Rome (Main Auditorium) Inaugural Session

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When in Rome...



Felicita Andreotti,
*professor of cardiovascular
medicine at the Catholic
University of Rome, takes
you on an insider's tour of
the city's great historical
landmarks.*

THE LOCATION OF THIS CONGRESS on the via Portuense appears unremarkable. Little evokes a vast empire that traced, in part, the outlines of modern Europe. It's the 30-km via Portuense, however, which has connected Rome to Trajan's harbour in Portus for almost 2000 years. Another port nearby, Ostia, to this day displays theatres, temples, shops and mosaics, dating from as early as 700BC and is now under consideration for world heritage status.

So when in Rome, don't miss Trajan's column in the north Forum area. This magnificent spiral frieze, celebrating victories of 101-106 and is a fine example of Rome's influence. You may recognise the same design in the nearby Marcus Aurelius column (c.180) and in Napoleon's Place Vendome column (c.1810).

Not far away on the Campidoglio (Capitoline hill) and beyond the equestrian Marcus Aurelius, get a bird's-eye view of the Forums. The other six hills, on the left bank of the Tiber, made up republican Rome (509-27BC), and the valleys occupied by the mostly imperial edifices (27-476BC). From the Campidoglio, head north-west into Campo Marzio, turn into via Giulia, and cross the Tiber at Isola Tiberina



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into Trastevere. Head north towards St Peter's and Hadrian's mausoleum (Castel S. Angelo), cross Ponte S. Angelo and on towards the Trevi fountain (Picture 1). Then, from Piazza del Popolo, head south-east by the Spanish Steps, via Condotti and Piazza Barberini (Triton fountain), and towards the central station.

You may have realised by now that Rome houses the largest world collection of obelisks: eight Egyptian, five Roman, and five modern. But Rome is so much more. For instance, the Romans are friendly, and generous, with a refined taste for art, luxury, and - to put it mildly - politics. There are top-class shops, dining, music and theatres.

You may wish to focus on specific artists or periods. For unparalleled Michelangelo (1475-1564), admire St. Peter's dome, the Campidoglio (Picture 2), S. Maria degli Angeli,



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the Vatican walls, and the Farnese palace; for his sculptures, St. Peter's Pietà, S. Pietro in Vincoli's Moses, S. Maria sopra Minerva's Christ; and for his paintings, of course, the Sistine chapel. For Bernini's masterful architecture (1598-1680), see St. Peter's spectacular colonnade and S. Andrea al Quirinale; and for his equally formidable sculptures, visit S. Maria della Vittoria, the Borghese gallery, piazza Navona's four-river fountain, the Triton fountain, and the obelisk-carrying elephant (Picture 3).



3

There are many reasons why ESC Congress 2016 is in Rome. But one must surely be because Rome is absolutely unique. Its arts, laws, politics and architecture - rooted in a multinational legacy from Greece, mid- and far-East, north Africa and Europe - have influenced world urbanisation, artists, and lifestyles, not to mention cuisine, couture, language, music and learning. We hope you enjoy at least a little of each.



Check out our special track entirely translated into Italian.

Four new practice guidelines for 2016



By **Pepe Zamorano**
University Hospital Ramon y Cajal
Madrid

FOR THE PAST FOUR YEARS, I have had the pleasure of introducing the new ESC Guidelines for each annual edition of *Congress News*. This year in Rome our guidelines originate from a mix of Latins, Etruscans and Sabines. The city itself successively became the capital of the Roman Kingdom, the Roman Republic and the Roman Empire, and is now regarded as a birthplace of Western civilisation and by some as the first ever metropolis. It is referred to as 'Roma aeterna' (the eternal city) and 'caput mundi' (capital of the world), two central notions in ancient Roman culture.

Like Rome, our ESC Guidelines this year have been developed with a mix of different specialists, a mix of knowledge, clear and open debate, and for sure careful evaluation by our reviewers. And like Rome, our ESC Congress is our 'aeterna' site, a place where science and knowledge are exchanged and where the emerging concepts of cardiology become reality.

This year we present four new ESC Clinical Practice Guidelines and one position paper. All will be formally presented and deeply discussed during this Congress. We will have an opportunity to discuss them with experts, to hear their highlights on Wednesday, and test our knowledge of them in a new ESC quiz. Each of the guidelines now contains their top ten take-home messages, but a careful, critical reading of each is recommended - and our aim remains to better help doctors for the best of their patients.

Among the new titles is a guideline on **Heart Failure**, with new information on newer drugs, new indications and a

revision of what was recommended in the previous version. **Atrial Fibrillation** is also presented this year. As with heart failure, there are new recommendations and a systematic review of evidence related to several specific topics. In an bid to be absolutely independent and transparent, the ESC contracted Cochrane, as an organisation without links to industry or to the ESC itself, to perform this systematic review of the evidence. And the Task Force used these reviews to support the evidence behind their recommendations. This is the first time that the ESC has provided a systematic review of this kind, a reflection of our continuous determination to use all tools available for transparency, honesty and help in the search of the best evidence.

In addition to these two guidelines, **Cardiovascular Prevention** and **Dyslipidaemia** guidelines will also be presented. Lipid targets are the same in both, but the dyslipidaemia guidelines provide deeper coverage of how to treat these patients. The prevention guidelines offer a wider message on general prevention in cardiology.

Finally, and again new this year, we present a Clinical Practice Guideline Position Paper on **Cardio-Oncology**, a reflection no doubt of a broadening field of interest where a multidisciplinary approach is needed. How to prevent and treat cardiotoxicity and how to follow these patients can be found in the document.

Concluding as I began. Rome has the status of a global city. In 2015 it ranked as one of the most visited cities in the world, the third most visited in the European Union, and the most popular tourist attraction in Italy. Its historic centre is listed by UNESCO as a World Heritage Site. Our ESC guidelines are the most visited section of our website, our app is really gaining in popularity - and not only in European countries but far beyond. No doubt our guidelines, your guidelines, are a real ESC world heritage. So it is a real pleasure to support best practice and

please be assured that I am happy to receive your comments - for the ultimate benefit of our patients.

During this ESC Congress, Professor Stephan Windecker will take over my role as Chair of the Committee for Practice Guidelines. His wisdom and wide view of different problems in the cardiovascular field make him an excellent choice to lead this important task of the ESC. I am sure he will be the leader we need for the future guidelines.



Do not miss the overview session of all 2016 Guidelines tomorrow morning at 8:30 (Rome). There will also be sessions dedicated to each of the new guidelines:

- Sunday 14:00 (Rome) for AF
- Monday 08:30 (Rome) for HF
- Monday 14:00 (Rome) for Dyslipidaemias
- Tuesday 08:30 (Rome) for Prevention

Your chances to meet the Task Forces and ask them the questions you may never otherwise have a chance to are on Sunday at 15:45, Monday at 10:15 and 15:45 and Tuesday at 10:15, all in Forum – The Hub. Don't forget the ESC Clinical Practice Guidelines 2016 Highlights on Wednesday at 08:45 (Rome).

Don't miss: My NCS @ ESC — sessions in the hub presenting Guidelines implementation
11:00 - 12:30 and 13:30 - 15:00

Edoxaban – A practical look at clinical applications

SATELLITE SYMPOSIUM

Saturday, 27 August 2016, 15:30 - 17:00, Athens - Village 5

- 15:30 **Welcome and introduction**
Professor Raffaele De Caterina, Italy
- 15:35 **Clinical pharmacology of edoxaban and its significance in clinical practice**
Professor Dietmar Trenk, Germany
Discussion
- 16:00 **Balancing safety and efficacy: updates from ENGAGE AF-TIMI 48 and Hokusai-VTE**
Dr Peter Verhamme, Belgium
Discussion
- 16:30 **Clinical applications of edoxaban: interactive patient cases**
Professor Christoph Bode, Germany
Discussion
- 16:55 **Summary and take-home messages**
Professor Paulus Kirchhof, UK



An aim to eliminate risk, not postpone it

The theme of this year's Geoffrey Rose lecture on population science

FEW EPIDEMIOLOGISTS could be better suited to deliver tomorrow's ESC Geoffrey Rose Lecture on Population Sciences than Guy De Backer, Honorary Professor of Medicine at Ghent University in Belgium. For De Backer himself began working with Geoffrey Rose back in the early 1970s and a few years later would run the Belgian arm of Rose's European Collaborative Group trial of multifactorial prevention of CHD. That six-year trial, published in *The Lancet* in 1986, would show unequivocally that preventive interventions work - and it would thus lay down the principles of what we now accept as preventive cardiology. Indeed, says De Backer, that collaborative study showed not just that preventive interventions work in CVD, but that the extent of benefit is directly related to the extent that the interventions are accepted and put into practice. This was especially apparent in the Belgian arm of the trial, where a net decrease of 24% in CHD endpoints was recorded.

As a prelude to tomorrow's eponymous lecture, 'Epidemiology and prevention of cardiovascular disease: quo vadis?', De Backer reminds us of Rose's much repeated claim that the real challenges in cardiovascular medicine today lie not with the treatment of acute conditions but with the wider environments which encourage their development. 'But don't forget,' says De Backer, 'that Rose's population philosophies began with clinical medicine, asking first what is the diagnosis and the treatment, and then why did it happen and could it have been prevented.' It was from an answer to the second question that Rose developed his view that, while high risk individuals must be treated, the real gains in CVD prevention would be derived from changes in whole populations. The prevalence of those at high risk would thus depend on where the whole population distribution of risk lies.

And today, says De Backer, the challenge in prevention is still to identify what people can do collectively - as populations - to change their risk profiles. It's for these reasons that lifestyle changes, and not high-risk strategies, have guided prevention policies over the three decades since publication of Rose's collaborative studies.



Professor Guy De Backer will give this year's Geoffrey Rose lecture.

So if the principles and shape of preventive cardiology are so chiseled in stone, where else is left for it to go? 'Quo vadis?', as De Backer challengingly asks. 'Well,' he replies, 'I'll make a plea for more research in prevention and for greater knowledge of how guidelines are implemented. It's also a fact that between 70 and 80% of our focus is on coronary heart disease and AMI. We don't have a *complete* prevention focus. What about heart failure? That's our main challenge right now.'

So De Backer sees a continuing need for research to build on those essential principles laid down by Geoffrey Rose, research into the broader epidemiology of CVD beyond AMI or stroke, which so far have been the dominant CVD endpoints in most research projects. 'We also need more sensitive and specific markers of long term exposure to low-intensity environmental factors, good a priori working hypotheses, and new methods of analysis.' The aim, insists De Backer, should

be to eliminate CVD risk, not merely postpone it. And that will need population change whose benefits will not be evident until the next generation.

Yet such pleas should not disguise the Herculean achievements that preventive cardiology has already made in just a few decades - in both primary and secondary prevention. 'There have been enormous gains in mortality and morbidity,' says De Backer. 'We've seen CVD mortality rates fall by 70% in Finland, by 50% in Belgium. Our life expectancy is now longer and that's much because of a population approach to public health. We've been very successful.'

Yet, he adds, there is still 'enormous potential' in primary prevention, in adopting these essential public health measures in an even wider cross-section of populations. As an investigator in the ongoing EUROASPIRE studies in secondary prevention, he knows too well that these same public health measures - this time encouraged in a population of coronary patients - are rarely fully adopted, even in this high-risk group. The latest EUROASPIRE survey, published last year, showed yet again that the large majority of coronary patients in Europe are failing to achieve their lifestyle, risk factor and therapeutic targets as set out in the latest prevention guidelines.

With a background in cardiology, rehabilitation and epidemiology but now retired from his former post, De Backer continues in Ghent as a post-doc fellow in public health, and is active still in EUROASPIRE and the prevention guidelines. He still describes Geoffrey Rose as much a mentor as colleague. 'It was a honour to work with him,' he says, 'and a honour to give this lecture in his name.'

ESC Geoffrey Rose Lecture on Population Sciences.
Epidemiology and prevention of cardiovascular disease:
quo vadis?
28 Aug 11:00-11:40 Bernini, The Hub

Stent technology: clinical advantages 'challenging'

IN TOMORROW'S Andreas Grüntzig lecture Jean Fajadet, co-director of the Interventional Cardiology Unit at Clinique Pasteur in Toulouse, France, will take his audience on a 40-year journey through the history of coronary interventions, concluding with the latest developments in bioresorbable scaffolds.

'The beauty of bioresorbable stents,' he says, 'is that they avoid leaving metallic cages in place long term. The scaffold releases drug when needed to prevent restenosis and then disappears, allowing us to achieve a far more natural physiological state for the vessel.'

But delivering demonstrable clinical advantages for the bioresorbable stent may prove challenging. 'At each step of the way going from the balloons to bare metal stent to the drug-eluting stent we have shown tangible improvements. Now with advances already made, it will be far more difficult to demonstrate further improvements,' cautions Fajadet.

The gains, he argues, can be considered analogous to asking athletes to shave centiseconds off running the hundred metres. 'It was far easier to achieve 10.1 seconds from 10.5 seconds, than it would be to beat Usain Bolt's current record of 9.58 seconds.'

Throughout the history of coronary interventions it is fascinating, says Fajadet, to see how clinicians have driven forward

the innovations. Cardiologists, for example, first noticed that stents used to prevent acute procedural problems of late dissection led to reductions in restenosis. An early trial that Fajadet took part in was BENESTENT which showed a lower rate of restenosis in the stent population than in the balloon angioplasty population.

Since then he has been involved in over 40 clinical trials, including RAVEL, ENDEAVOR II, E-SIRUS, and COMPARE ABSORB. 'Participating in clinical trials is enormously rewarding,' he says. 'It helps you to advance the story and learn to work with real precision and rigor.'

Fajadet himself has played a significant role in advancing interventional cardiology. He was the first in France to implant the first Palmaz balloon expanding stent in 1989 and to use the transradial approach for stent implantation in 1994. His inspiration for the latter came from viewing Ferdinand Kiemeneij's poster at an American Heart Association meeting. 'This shows the real value of attending meetings,' says Fajadet. 'They tell you about the latest ground breaking research and help you get ahead of the game.'

Indeed, he adds, Grüntzig himself first presented his balloon angioplasty results as a poster at a meeting and today Fajadet feels privileged to have met Grüntzig at a conference in 1982. 'He was a really



Jean Fajadet, co-director of the Interventional Cardiology Unit at the Clinique Pasteur in Toulouse, will deliver tomorrow's Andreas Grüntzig lecture on interventional cardiology.

charismatic guy who understood that the future was to move from single vessel disease to multivessel disease and complex coronary lesions. When I met him he was trying to moderate the enthusiasm of interventional cardiologists because he didn't want to kill off the technique by doing everything too quickly.' Tragically Grüntzig died in 1985 in a plane crash.

For Fajadet, education is a major interest. With his mentor Jean Marco, also from the Clinique Pasteur, Fajadet co-founded EuroPCR. They are immensely proud that their meeting has grown from just 150 attendees at the first sessions held in Toulouse in 1989 to more than 12,000 at the last meeting

held in Paris in May. 'The overall aim of EuroPCR, which is focused on daily practice, is to provide the best care for our patients,' says Fajadet., adding the possibility for interventionists to have hands-on experience has helped new techniques to be adopted more quickly into clinical practice.

ESC Andreas Grüntzig Lecture on Interventional Cardiology.
From balloon to bioresorbable scaffold: a 40-year journey in coronary intervention.
28 Aug 14:00-14:40 Bernini, The Hub

How to make the smokers quit: what works?

ONLY ONE-THIRD to one half of patients who smoke at the time of myocardial infarction subsequently manage to quit. This morning a Symposium will explore how medications, motivational support and other technologies can be used to help people with cardiovascular disease in their fight to give up smoking.

Undoubtedly, quitting is the most beneficial change MI patients can make to improve long-term health, with one review finding a 36% reduction in mortality among MI patients who quit compared to those continuing smoking.

'There's real shock value in suffering a cardiac event,' says Serena Tonstad from Oslo University Hospital. 'If MI patients don't manage to quit in these circumstances, it shows they are not every day smokers but suffering from a serious addiction and needing special help.'

After MI, she adds, cardiologists can play a key role in motivating quitting and can offer tailored information. 'For example, someone who has just had a PCI and stent placement could be told that the risk of chest pain or a new MI in the next year is increased by over 50% if they continue to smoke,' she says.

While studies have found that high-intensity behavioural interventions beginning in hospital promote the success of smoking cessation (Cochrane Database Syst Rev: CD001837), the reality is that the baton will usually be passed to family practitioners. It should never be assumed, Tonstad warns, that GPs will have the situation covered. 'It only takes a sentence in your discharge notes to ask GPs to check that the patient has stopped smoking,' she says.

According to Kornelia Kotseva, one of the



Serena Tonstad:
A key role for motivation.

investigators of the EUROASPIRE prevention surveys, one area where GPs may need particular reassurance from cardiologists is prescribing medication for smoking cessation. A recent Cochrane analysis found the number of people stopping smoking was higher for the drug varenicline than for bupropion or nicotine replacement (Cochrane Database Syst Rev: CD006103).

The EUROACTION Plus trial, involving 696 high risk CVD patients, provides reassurance that preventive cardiology programmes using optional varenicline substantially increases smoking abstinence over 16 weeks compared with usual care (Eur Heart J 2014, 35: 1411-1420). However, despite this well-established efficacy, there have been concerns about adverse CVD



Kornelia Kotseva:
How medication can increase abstinence

events. One meta-analysis reported patients receiving varenicline had a numerically but not statistically significant increased risk of serious adverse CVD events, while two other meta-analyses found no significant increase in adverse cardiovascular events (BMJ 2012; 344: e2856; Am J Ther 2013; 20: 235-246).

Most recently, a 2016 meta-analysis which included 38 randomised controlled trials comparing varenicline with placebo in smoking cessation where cardiovascular serious adverse events were reported, found no difference between the two groups for CVD serious adverse events (RR 1.03). Reassuringly, no differences were revealed between adverse events in CVD patients (RR 1.04) and non CVD patients (RR 1.03).

'The results of the most recent meta-analysis show that there's no real evidence that varenicline increases the risk of CVD adverse events,' says Kotseva, from Imperial College, London. 'Given varenicline's efficacy as a smoking cessation drug and the long-term CV benefits of cessation, it should continue to be prescribed for smoking cessation.'

Philip Tønnesen, from Rigshospitalet, Copenhagen, will tackle the controversial issue of whether e-cigarettes (ECs) make a contribution to smoking cessation. ECs, which first appeared in 2006, are battery-powered devices that vaporise nicotine, flavourings and other chemicals into an inhalable vapour. Trials looking at ECs have been limited, with two studies – the ECLAT and ASCEND – finding no statistical difference in quit rates between ECs, placebo and nicotine patches. On the plus side, says Tønnesen, no studies have reported any serious adverse events relating to EC use.

'While I can't recommend ECs for smoking cessation as a physician, because there's a great deal more evidence for pharmaceutical agents, undoubtedly they have an important role to play for people who have tried unsuccessfully to quit on a number of occasions,' says Tønnesen. With levels of toxicants up to 450 times lower in ECs than real cigarettes, no one disputes that they are by far the preferable option for people with CVD.

What works in smoking cessation in heart disease?
27 Aug 11:00-12:30 Paris, Village 7

Join us for our Satellite Symposia



Interpreting findings with non-vitamin K antagonist (VKA) oral anticoagulants in atrial fibrillation – collective views on data from seminal studies to present clinical practice

Sunday 28 August 2016,
12.45–13.45,
Room Prague –
Village 9

Moderated by chairs:
Christoph Bode and Jafna Cox

Developing real-world patient pathways in acute pulmonary embolism

Monday 29 August 2016,
12.45–13.45,
Room Reykjavik –
Village 7

Moderated by chair:
Stavros Konstantinides

Practical management of patients with atrial fibrillation – individualized approaches to stroke prevention

Tuesday 30 August 2016,
12.45–13.45,
Room Berlin –
Village 4

Moderated by chairs:
John Camm and Riccardo Cappato

A congress track just for young members

Dedicated programmes for the cardiologists and scientists of tomorrow

THE CARDIOLOGIST OF TOMORROW (CoT) Track, which includes 18 sessions, has been designed by young cardiologists to specifically cater for the educational needs of cardiologists in training.

'With an increasing number of congress delegates now aged 35 and under we anticipate that CoT track sessions will prove more popular than ever before,' says Afzal Sohaib, a member of the CoT nucleus of seven young cardiologists who devised the track.

Highlights include six clinical case learning sessions, where young cardiologists will present cases in a highly interactive forum. This year, out of 376 submitted cases, 42 have been selected for presentation, with topics including structural interventions (Sunday 14:00-15:30); inflammatory heart disease (Sunday 16:30-18:00); arrhythmias (Monday 16:30-18:00); 'nightmares' in the cath lab (Tuesday 14:00-15:30); and cardiomyopathies (Tuesday 16:30-18:00).

'Our clinical cases range from the weird and wonderful to classical cases,' says Sohaib, from Imperial College, London. 'They offer a tangible way to see how guidelines work in practice and learn about exceptions to the rule.' The advantage of clinical cases, he adds, is that

unlike abstracts they do not require loads of data to be generated. 'All you need is one good case, which means young cardiologists get an opportunity to present at an international meeting early on in training.'

In the 'Challenging Case' session the four overall finalists will present their cases (Sunday 11:00-12:30), with the overall winner announced at the Awards Ceremony (Monday 18:00-19:00, Agora 1 –Poster Area).

Early birds can get their day off to a bright start with the three Science at Breakfast sessions – 'Obesity - Friend or foe in heart failure' (Sunday 07:45-08:15); 'Timing of surgery in infective endocarditis' (Monday 07:45-08:15); and 'Sport is not always healthy for your heart' (Tuesday 07:45-08:15).

The eight scheduled symposiums include 'Looking at the crystal ball' (Monday 8:30-10:00), 'What does the busy cardiologist need to know about recent advances in cardiology' (Monday 11:00-12:30) and the ever popular 'How to interpret statistics in clinical trials' (Tuesday 16:30-18:00).

'East meets West' is a joint session with Korean young cardiologists exploring conditions affecting Eastern populations, including Takotsubo cardiomyopathy and



Four of the Cardiologists of Tomorrow 'nucleus': from left, Afzal Sohaib, Saverio Muscoli, Rafael Vidal Perez (a former nucleus member) and Maria Rubini: 'Catering for educational needs of cardiologists in training.'

Takayasu disease (Monday 12:45-13:45).

There's an opportunity for networking in joining the CoT corner on the ESC Stand where several CoT leaders and nucleus members will be present. 'Interactions at conferences are enormously valuable because they open the way for scientific collaborations, and for young cardiologists to share their experiences of training in different countries,' says Sohaib.

Please note all the sessions are in Michelangelo – the Hub unless otherwise stated.

Running in parallel is the Scientists of Tomorrow tract, now in its third year, with 11 sessions over three days. Highlights include 'Raising funding in Europe' (Sunday 12:45-13:45); The value of innovative animal models' (Monday 08:30-10:00) and 'MiRNAs in cardiovascular disease' (Tuesday 11:00-12:30). All these sessions are held in Bernini - The Hub.

• Look for the Cardiologists of Tomorrow and Scientists of Tomorrow tracks in the mobile app or the SP&P.

ESC sets out new position paper in cardio-oncology



By Giorgio Minotti
University Hospital Muenster
Muenster, Germany



and Stephan Achenbach
University Heart Center
Zurich, Switzerland

CARDIO-ONCOLOGY, which includes all aspects of the relationship between cardiovascular and malignant disease, is an area of increasing relevance in clinical practice. One major aspect - though not the only one - is the cardiovascular toxicity of anticancer treatments, most commonly between chemotherapy and heart failure. However, there are less frequent and less well-known interactions, such as induction and aggravation of atherosclerosis by chemotherapy and radiation. While many side effects are manifest during treatment or shortly after, others may not become clinically evident for decades, such as late heart failure secondary to chemotherapy or valvular stenosis as a consequence of radiation treatment.

The cardiologist can become involved at many stages: when CVD becomes manifest during treatment, but also when patients present with symptoms many years after successful cancer therapy. Increasingly, cardiovascular specialists will be consulted when malignant disease requires treatment in patients with pre-existing heart disease and optimally they should be involved and patients evaluated before anticancer treatment.

Given the high clinical relevance, the ESC has issued a 2016 *Position Paper on Cancer Treatments and Cardiovascular*

Toxicity, which was developed under the auspices of the ESC Committee for Practice Guidelines by a Task Force chaired by Jose Zamorano and Patrizio Lancellotti and including representatives of the International CardioOncology Society (ICOS). The document covers all aspects of cardiovascular toxicity in the context of anticancer treatment, providing expert opinion for management (given the paucity of randomised evidence) and summarising the most important recommendations.

Most of the Position Paper is devoted to myocardial dysfunction and heart failure as a consequence of chemotherapy. Especially in the case of anthracyclines, the incidence of left ventricular dysfunction depends on cumulative dose and can be as high as 48%. Effects can occur as early as after the first dose, and, while labeled as 'early' up to one year after treatment, late effects are frequent and occur at a median time of seven years after chemotherapy. In this context, survivors of childhood cancer treated with anthracyclines and/or mediastinal radiotherapy are at particular risk, with a 15-fold increased lifetime risk for heart failure compared to matched controls. But even in older patients treated with reportedly safe 'subthreshold' doses of anthracyclines, the rate of heart failure can be as high as 10%.

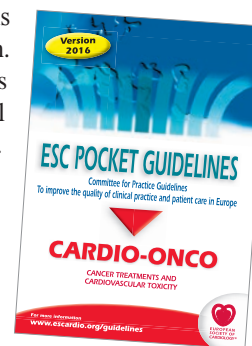
Next to cumulative dose and very young or old age, risk factors for anthracycline-induced cardiotoxicity include female gender, renal failure, concomitant cardiotoxic therapy (drug therapy or radiation), and pre-existing conditions such as heart disease and arterial hypertension. For this reason, it is essential to identify patients at risk for myocardial toxicity through a careful baseline assessment of cardiovascular risk factors. With baseline dysfunction, therapy should be discussed with the oncology team and options for less cardiotoxic liposomal anthracyclines, non anthracycline-containing chemotherapy and/or cardioprotection should be considered as well as

plans to monitor cardiac function during therapy. In this context, any reduction of LV-EF >10 percentage points to below the lower limit of normal suggests cardiotoxicity, as well as a >15% relative change of global longitudinal strain from baseline.

As far as treatment is considered, optimisation of cardiovascular risk factors before therapy is recommended. It has been shown that patients with anthracycline-induced cardiotoxicity have better outcome when treated with ACE-inhibitors and/or beta blockers early after the detection of cardiac dysfunction. Thus, such treatment is suggested for all individuals in whom LV-EF decreases >10% or to below the lower limit of normal, as these patients, even when currently asymptomatic, are at high risk for developing symptomatic heart failure.

Coronary artery disease and myocardial ischemia due to vasospasm, endothelial injury, and thrombosis can be a further side effect of anticancer therapy. So once again, baseline assessment by history, risk factor and echocardiography plays an important role. Arrhythmias and SCD can be an acute effect of chemotherapy, and QT prolongation has been reported in the context of anthracyclines, histone deacetylase inhibitors, many tyrosine kinase inhibitors and, in particular, with arsenic trioxide. Valvular disease can develop (usually late) as a consequence of radiation therapy, and peripheral vascular disease can be a consequence either of radiation or specific drugs.

Overall, this ESC Position Paper provides an extremely valuable resource not only to all those who are involved in giving care to patients with cancer, but to all healthcare professionals exposed to CVD, especially that side effects of treatment may become clinically apparent many years after completion of treatment. Clearly, this is an area of rapid growth, so future versions of the document will provide more specific recommendations and more detailed management advice.



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Taking the multidisciplinary decision

Interventionist William Wijns and surgeon Philippe Kolh support the concept of the heart team

THE LEVEL OF CARE in medicine can be improved and made more consistent with the use of multidisciplinary teams to recommend the most optimal treatment. For example, pretreatment multidisciplinary discussion in tumour boards, introduced as early as the 1960s, has been shown to improve survival and to reduce hospital-variations in rates.

Multidisciplinary heart teams have been developed for the treatment of heart failure, congenital heart disease, aortic and mitral valve interventions, and myocardial revascularisation. The creation of a heart team, consisting of a clinical or non-invasive cardiologist, an interventional cardiologist and a cardiac surgeon, serves the purpose of a balanced multidisciplinary decision process. Additional input may be needed from general practitioners, anaesthesiologists, geriatricians, intensivists, or other specialists involved with the care of the patient ('extended' heart team).¹

In the field of myocardial revascularisation (MR), while decision-making for patients with acute indications or less complex CAD may be straightforward, European and American guidelines strongly advocate the implementation of heart team decisions for patients with stable and complex CAD as class of recommendation I (level of evidence C).^{2,3} Meetings of the heart team should be organised according to local needs: heart team discussions may be scheduled daily, weekly, or at various intervals, as suitable.



William Wijns: A balanced multidisciplinary decision process.

The benefit of a heart team decision is convincingly presented throughout the literature. Interestingly, some studies have shown that re-discussing the same patients after one year leads to different discussions in about 25% of the cases.⁴ This underscores the fact that, in some CAD patients, both treatment modalities – PCI or CABG – might be appropriate. Also, including other clinical specialists into this conference might lead to a significant proportion of treatment recommendations other than MR (eg, medical therapy, heart transplantation, ventricular assist device, or valve surgery).

Despite being strongly recommended in the guidelines, the heart team concept has probably



Philippe Kolh: Other recommendations than myocardial revascularisation.

not been yet sufficiently implemented. As an example, the OECD (Organization for Economy Cooperation and Development) reports an *average* rate of 218 coronary revascularisation procedures per 100,000 population, with an average PCI proportion of 72% performed in 2013.⁵ There is, however, a high variation in these figures across countries, which may partly be the consequence of physician-related factors - and these have raised concerns about overuse, underuse and inappropriate selection of revascularisation.

Heart teams can initiate patient discussions using the treatment algorithms as outlined in the guidelines - however, as doctors, clinical decision-making typically requires a more

comprehensive understanding of the unique characteristics of the individual patient. For patient-focused care, each specialty needs to hear the other colleagues' viewpoint. When this fails to happen, we need to remain cognizant of the fact that it is the patient who ultimately loses from dysfunctional interactions - market share is not the issue. And remember that cardiologists and cardiac surgeons are on the same team – the Heart Team.

1. Wijns W, Kolh P, Danchin N, et al. Guidelines on myocardial revascularization. *Eur Heart J* 2010; 31: 2501-2555.
2. Windecker S, Kolh P, Alfonso F, et al. 2014 ESC/EACTS Guidelines on myocardial revascularization: *Eur Heart J* 2014; 35: 2541-2619.
3. Fihn SD, Gardin JM, Abrams J, et al. 2012 ACCF/AHA/ACP/AATS/PCNA/SCAI/STS Guideline for the diagnosis and management of patients with stable ischemic heart disease. *J Am Coll Cardiol* 2012; 60: e44-e164.
4. Yates MT, Sopha GK, Valencia O, et al. Impact of European Society of Cardiology and European Association for Cardiothoracic Surgery Guidelines on Myocardial Revascularization on the activity of percutaneous coronary intervention and coronary artery bypass graft surgery for stable coronary artery disease. *J Thorac Cardiovasc Surg* 2014; 147: 606-610.
5. OECD (2015), *Health at a Glance 2015: OECD Indicators*, OECD Publishing, Paris, 2016.

Look out for sessions related to the Spotlight of the Congress in the congress scientific planner.



This programme is accredited by the European Board for Accreditation in Cardiology (EBAC) for 2 hours of external CME credit. Each participant should claim only those hours of credit that have actually been spent in the educational activity.

Organised by: University Hospital of Umeå, Sweden
Course Director: Ulf Näslund, Professor of Cardiology



EBAC ACCREDITED EDUCATIONAL PROGRAMME HELD DURING THE ESC CONGRESS 2016

The clinical journey after an acute coronary syndrome: strategies for optimising antiplatelet therapy

Saturday 27th August | 15.30 – 17.00 | Berlin Room – Village 4

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Davide Capodanno | Italy
Christian Hamm | Germany

Stefan James | Sweden
Gabriel Steg | France
Marc Bonaca | US

Join Professors James, Steg and Bonaca for further discussion and debate at Bernini, The Hub

EBAC ACCREDITED EDUCATIONAL PROGRAMME – EXPERTS ON THE SPOT Sunday 28th August | 10.15 – 10.45

Supported by an unrestricted educational grant from AstraZeneca

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How is the Heart Team working in your country?



Dirk Lok, general cardiologist, from Overijssel, The Netherlands

We use heart teams to provide secondary prevention advice for people who have suffered an MI. The cardiologist starts the process off in hospital by providing patients with an explanation of their condition. Then once home, three times a week for six weeks they are invited to rehabilitation sessions where they have training sessions with physiotherapists. Next are talks from different members of the team - psychologists, social workers, dieticians, physiotherapists and rehabilitation experts. We offer group sessions and find that people really enjoy meeting and talking about common experiences. We also encourage partners to come along as they are also valuable members of the heart team. Studies show heart team sessions are really cost effective – they reduce anxiety, and hospitalisation and have positive effects on mortality.



Amal Kumar Banerjee
Cardiologist, India

There are heart teams in around half the medical institutions in India. Given the prevalence of diabetes and heart disease in India, they play a very important role from the anaesthetist to the cardiologist. It's the heart team's role to make decisions about patients and discuss the best course of treatment, especially with complex cases. And these decisions and choices then have to be translated into simple language for the patient to understand. Nurses are key in making this possible. Of course some patients - around 15% - will decide they don't want to go ahead with treatment, such as PCI. It's not just about medical interventions. The importance of the team also lies in counselling about healthy lifestyles. This is the role of the dietician and public health nurse working in collaboration with everyone else.

faces in the crowd



Josiane Boyne, nurse specialist, Maastricht, The Netherlands

My role within the heart team is co-ordinating heart failure care. I work within the Maastricht University Medical Centre but collaborate with GPs and the other specialists on the team. It's successful because we have effective protocols - everyone communicates and shares information. There's no hierarchy. About a year ago we set up a special project to make referrals between GPs and cardiologists even better. Together we use an instrument based on taking blood samples so we can tell if patients are adherent or not. Those that are severely unwell are referred back to the cardiologist, and cases of low severity go back to the GP. The project has been set up by our team at our own hospital but we are now collaborating with teams at five others.



Eduardo Kehde, general cardiologist, San Paolo, Brazil

I work at a big hospital in Brazil where our heart team consists of clinical cardiologists, surgeons, intensivists, haemodynamic experts, imaging specialists, physiotherapists, dieticians and nurses. Once a month we have a long meeting where we all get together to discuss the management of our most complex cases. It is a really informative session where we consider patients from all the different angles, and are able to learn a great deal from each other. We also use these sessions as opportunities for updates about the latest developments in cardiology. In fact, when I get home I will be presenting the highlights of the ESC Congress to the team.

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EBAC ACCREDITED EDUCATIONAL PROGRAMME HELD DURING THE ESC CONGRESS 2016

Chairpersons:

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(Germany)

A. Maggioni
(Italy)

Scientific programme

Optimizing heart failure care:
each step, each beat, each visit

Speakers:

M. Böhm (Germany), **O. Chioncel** (Romania), **M. Cowie** (UK),
G. Filippatos (Greece), **P. Lancellotti** (Belgium), **A. Maggioni** (Italy),
J. L. Zamorano (Spain)

Lecture Room Brussels – Village 8

Saturday, August 27, 2016

15.30-17.00

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