11,000 submissions.

- 4594 abstracts selected from more than 24 registry studies
- 26 clinical trial updates
- 28 clinical Hot Line studies

The programme includes:

- A congress more interactive than ever before
- Seminars to talk about the pros and cons of current controversies in cardiology, to discuss with the audience in the context of a heart team. "We want to hear the voice of the patient. These are really interactive sessions,“ says Derumeaux.

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 arterial diseases,' explains Derumeaux.

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.

There needs to be cross talk with everyone, an emphasis on teamwork and interactions between all professionals and specialties involved in treating patients with CVD. Says Geneviève Derumeaux: ‘We really want to show that for optimal outcomes it’s important to have professionals from different cardiology disciplines including nurses, surgeons, and diabetologists working together with cardiologists. There needs to be cross talk with everyone, an understanding of what each of the other sub-specialities do and how they can support each other for the benefit of patients.’

Another major push this year has been to 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 diabetologists 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 University Hospital, Lisbon, aortic stenosis 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.’

www.escardio.org/365

Discussions and interviews with international experts

www.escardio.org/ESCTV

Don’t Miss

- 09:00 - 10:15 Special Tracks
  - General Cardiology for Physicians, Technicians and General Practitioners
    Forum (The Hub)
  - General Cardiology for Nurses and Allied Professionals
    Gallileo (The Hub)
  - Cardiologists & Surgeons track
    Sarajevo (Village 2)
  - My NCS@ESC on 2015 Guidelines & Mini Quiz
    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 Visit the Poster Area, Moderated Posters & Best Posters
  (12:35 - 13:25) and the Agora for Rapid Fire Abstract Sessions

- 09:00 - 15:00 General Cardiology for Physicians, Technicians and General Practitioners Forum (The Hub)
- 09:00 - 15:00 General Cardiology for Nurses and Allied Professionals Gallileo (The Hub)
- 09:00 - 15:00 Cardiologists & Surgeons Sarajevo (Village 2)
- 09:00 - 15:00 My NCS@ESC on 2015 Guidelines & Mini Quiz The Hub

- 17:00 - 18:30 Visit the Poster Area, Moderated Posters & Best Posters
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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 freize, 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 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, 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).

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

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 Poulus Kirchhof, UK

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 Dyslipidaemia
- 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).
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 ‘at least for the time being, no real change can be derived from changes in whole populations. The prevalence of those at high risk must be treated, the real gains in CVD prevention would be 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 improve their risk profiles. It’s for these reasons that he believes, and not high-risk strategies, have guided prevention policies over the three decades since publication of Rose’s collaborative studies.

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 a post-doctoral 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.’

Stent technology: clinical advantages ‘challenging’

IN TOMORROW’S Andreas Grünzig 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 for life long. 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 while advances over the past decade have led to 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 a centisecond 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, ELSIBUS, 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 patients 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 transluminal 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, Grünzig himself first presented his balloon angioplasty results as a poster at a meeting and today Fajadet feels privileged to have met Grünzig at a conference in 1982. ‘He was a really 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 Grünzig 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 the Interventional Cardiology Unit at Clinique Pasteur in Toulouse, which has a 40-year journey in coronary intervention. 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, ELSIBUS, 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 patients and rigor.’

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

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

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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 everyday 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, they continue to smoke,’ she says.

While studies have found that high-intensity behavioural interventions beginning in hospital promote the success of smoking cessation, while 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 people who have tried unsuccessfully to quit 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 1.64) 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 vapourise 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 Symposium

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

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 Sohail, 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 Sohail, 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 their 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); ‘Taming 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 08:30-10:00); ‘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 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 Sohail.

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

Running in parallel is the Scientists of Tomorrow track, 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); ‘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

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 Airoldi and including representatives of the International Cardio Oncology 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 labelled 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-anthracyline-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 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 ischaemia due to vasoospasm, endothelial injury, and thrombosis can be a further side effect of anticancer therapy. So once again, baseline assessment and 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.
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-variation in rates. Multidisciplinary heart teams have been developed for the treatment of heart failure, congenital heart disease, aortic and mitral valve interventions, and myocardial revascularization. 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). In the field of myocardial revascularization (MR), while decision-making for patients with acute indications or less complex CAD might be straightforward, European and American guidelines strongly advocate the implementation of heart team decisions for myocardial revascularization. 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.

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. 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 (e.g., medical therapy, heart transplantation, ventricular assist device, or valve surgery).

Despite being strongly recommended in the guidelines, the heart team concept has probably not been yet sufficiently implemented. As an example, the OECD (Organization for Economic 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 2013.3 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.

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Supported by an unrestricted educational grant from AstraZeneca

In compliance with EBAC/EACCME guidelines, all speakers/chairpersons participating in this programme have disclosed or indicated potential conflicts of interest which might cause a bias in the presentations. The Organising Committee/Course Director is responsible for ensuring that all potential conflicts of interest relevant to the event are declared to the audience prior to the CME activities.
How is the Heart Team working in your country?

We are 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.

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 dietitian and public health nurse working in collaboration with everyone else.

faces in the crowd

Josiam Boyne, nurse specialist, Overijssel, The Netherlands

Dvě Lok, general cardiologist, from Ovoojssel, The Netherlands

Amal Kumar Banerjee, Cardiologist, India

Eduardo Kohler, general cardiologist, San Paolo, Brazil

My role within the heart team is co-ordinating heart failure cases. 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.

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’ll be presenting the highlights of the ESC Congress to the team.

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