New ESC Guidelines: Redefining Holistic Care in Cardiology

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Citation:	EMJ Cardiol. 2025;13[1]:32-36. https://doi.org/10.33590/emjcardiol/VBZD6589

LANDMARK guideline updates and consensus statements were unveiled at the European Society of Cardiology (ESC) Congress 2025 in Madrid, Spain, reshaping the way cardiologists approach patient care. From myocarditis to mental health, dyslipidaemias, pregnancy, and valvular disease, the new recommendations share common themes: multimodality imaging, genetic insights, psychosocial factors, and patient-centred, multidisciplinary decision-making. Together, they mark a shift towards more precise, integrated, and holistic cardiovascular care.

MYOCARDITIS AND PERICARDITIS

The first European joint guidelines on myocarditis and pericarditis[1] mark a significant step forward in unifying the management of these overlapping conditions. A new umbrella term, inflammatory myopericardial syndrome (IMPS), has been introduced to highlight their shared aetiologies and anatomical contiguity. The overlap is clinically important: up to 30% of patients with pericarditis show troponin elevation, indicating myocardial involvement, while cardiac MRI (CMR) in myocarditis often reveals pericardial effusion. Recognition of red flags, such as flu-like prodromes, ECG changes, and multimodality imaging findings, can aid risk stratification and help identify patients at higher risk of recurrence.

The guidelines introduce presentation-driven flowcharts, tailored to chest pain, arrhythmias, or heart failure, providing step-by-step pathways from diagnosis through therapy. A paradigm shift is evident in the reliance on multimodality imaging: ECG and echocardiography remain cornerstones, but CMR has emerged as the definitive, non-invasive tool to confirm myocarditis, distinguishing between reversible and irreversible changes while identifying inflammation, oedema, and fibrosis. By contrast, endomyocardial biopsy now has a narrower role, reserved for intermediate- to high-risk patients where histology may guide treatment decisions.

Genetics is increasingly recognised as a determinant of disease trajectory, whether involving a single episode, recurrence, or multiple relapses. This supports selective genetic screening, particularly in patients with autoimmune or inflammatory overlap. Management has become more tailored: personalised exercise recommendations replace blanket restrictions, advocating cessation of training or exertion for at least 1 month until remission in both athletes and non-athletes.

Therapeutic strategies are similarly nuanced. Anti-inflammatory therapy is first-line in uncomplicated cases, escalating to aetiology-directed treatments in more complex disease, while immunosuppressants are not routinely

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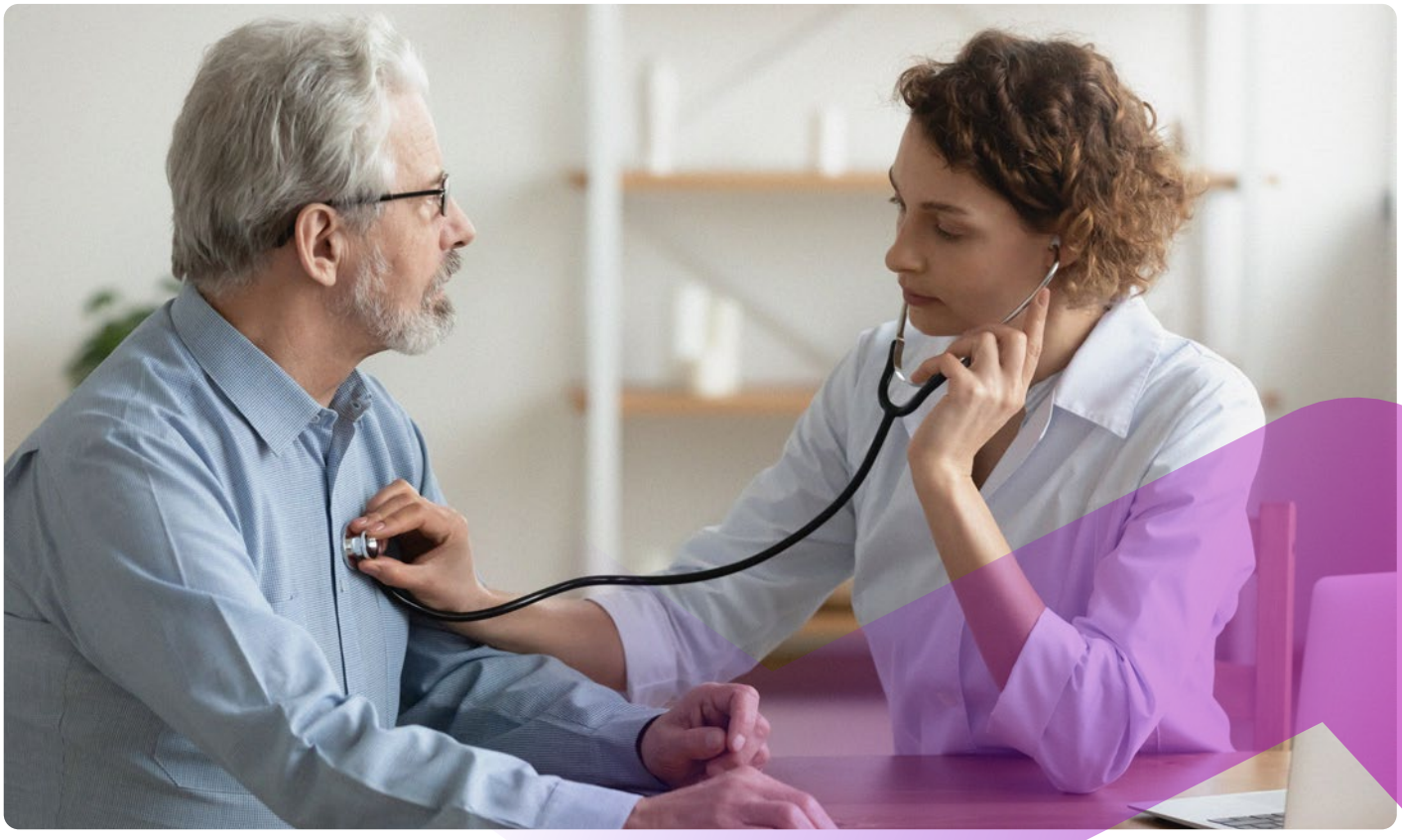
recommended in acute myocarditis with preserved ejection fraction. For pericarditis and IMPS, combination therapy with corticosteroids, non-steroidal anti-inflammatory drugs, and colchicine is encouraged before progressing to biologics. Anti-IL-1 agents are reserved for refractory inflammatory phenotypes.

At the heart of the recommendations is the IMPS multidisciplinary team, bringing together expertise in imaging, surgery, pathology, and clinical management to optimise outcomes for this heterogeneous and often challenging group of patients.

DYSLIPIDAEMIAS

The 2025 ESC/European Atherosclerosis Society (EAS) updated guidelines on dyslipidaemias[2] introduce important updates in cardiovascular risk assessment and lipid-lowering strategies. For risk estimation, the traditional Systematic COronary Risk Evaluation (SCORE) system has been replaced by SCORE2, which calculates 10-year risk of both fatal and non-fatal atherosclerotic cardiovascular disease in apparently healthy individuals. Risk assessment is further refined by incorporating subclinical coronary atherosclerosis as a modifier, in addition to elevated coronary calcium scores. A new set of clinical risk modifiers, including demographic and clinical factors alongside biomarkers such as elevated high-sensitivity C-reactive protein and lipoprotein(a), has also been introduced. Notably, lipoprotein(a) >50 mg/dL is now recognised as a cardiovascular risk-enhancing factor in all adults.

Treatment targets for low-density lipoprotein cholesterol (LDL-C) remain unchanged, but a new 'extreme risk' category has been added, with a recommended target LDL-C threshold of <1.0 mmol/L. In terms of therapy, statins remain first-line, but new agents expand the treatment landscape. Bempedoic acid is recommended for patients unable to tolerate statins, while evinacumab is highlighted for those with homozygous familial hypercholesterolaemia refractory to standard therapies. Lipid-lowering therapy should be intensified during acute coronary syndrome hospitalisation: for patients



already on therapy, treatment is escalated; for treatment-naïve patients, initiation with high-intensity statin plus ezetimibe is advised.

For hypertriglyceridaemia, high-dose icosapent ethyl (rather than general poly-unsaturated fatty acid supplementation) is now specifically recommended alongside statins in high-risk patients. Volanesorsen may be considered for severe familial chylomicronaemia syndrome. The guidelines also broaden statin use to special populations, recommending therapy for all people with HIV aged ≥40 years, regardless of LDL-C, and for patients with cancer at high risk of chemotherapy-related cardiotoxicity. Finally, the use of dietary supplements lacking proven LDL-lowering efficacy is discouraged.

CARDIOVASCULAR DISEASE AND PREGNANCY

The 2025 ESC guidelines on cardiovascular disease (CVD) and pregnancy[3] reflect an important shift in focus from managing CVD during pregnancy only, to addressing women's health from preconception and pregnancy through delivery, postpartum, and long-term outcomes. Central to the recommendations is the Pregnancy Heart Team, which ensures coordinated care and shared decision-making throughout this journey.

Risk stratification remains key, with the modified WHO (mWHO) 2.0 classification providing a more refined framework. Categories have been expanded to include arrhythmias and cardiomyopathies, with more nuanced risk estimates. Women in mWHO II–III and IV categories require Pregnancy Heart Team involvement. Notably, Class IV is no longer an absolute contraindication to pregnancy; instead, expert counselling and recognition of women's autonomy are emphasised.

Delivery planning is clarified, with vaginal delivery recommended for most women with CVD, supported by stronger evidence than in prior guidelines. A new flowchart outlines the management of urgent delivery in women receiving anticoagulation. Beyond pregnancy, a dedicated chapter highlights the need for long-term cardiovascular risk assessment in women with adverse pregnancy outcomes, together with lifestyle counselling to reduce future risk.

Several clinical management updates are included. Pre-pregnancy aortic root surgery is now recommended based not only on clinical history but also genetic variants and patient preference. Genetic counselling is also advised in peripartum cardiomyopathy. Women with pulmonary arterial hypertension require clear contraceptive advice, as several targeted therapies, including endothelin receptor antagonists, riociguat, and selexipag, are contraindicated in pregnancy. In suspected postpartum venous thromboembolism, diagnostic imaging should not be withheld, including CT scans.

Specific recommendations address cardiomyopathies and arrhythmias, including the use of β-blockers in long QT syndrome. Practical clinical scenarios are also embedded: for example, chest pain in pregnancy should be investigated as in non-pregnant patients, but with heightened awareness of pregnancy-specific causes such as pulmonary embolism, acute aortic syndromes, and spontaneous coronary artery dissection. In cardiac arrest, standard management also applies, supplemented by pregnancy-specific measures such as left uterine displacement, intravenous access above the diaphragm, and reassurance that no drugs should be withheld due to teratogenicity concerns.

CARDIOVASCULAR DISEASE AND MENTAL HEALTH

The first ESC Clinical Consensus Statement on mental health and cardiovascular disease[4] represents a landmark, developed with the same rigorous process as formal guidelines and incorporating both patient perspectives and clinical case scenarios. It recognises mental health as a continuum, from optimal wellbeing, through conditions and disorders, to severe mental illness, and emphasises the multidirectional links between CVD and mental health. People with depression are 50% more likely to experience myocardial infarction, while up to one in three patients with established CVD live with anxiety, depression, or post-traumatic stress disorder, particularly women and younger patients. When CVD and mental health conditions co-exist, the risk of adverse outcomes and mortality rises sharply. Psychosocial stress is now also recognised as an independent risk factor, and support for informal caregivers is also highlighted.

To address these challenges, the statement calls for Psycho-Cardio teams embedded in both hospital and outpatient cardiovascular services, integrating mental health professionals with primary and social care. A practical framework, the list of ACTIVE principles (Acknowledge, Check, Tools, Implement, Venture, Evaluate), is recommended to support mental health within cardiovascular practice.

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Routine screening is advised, beginning with a brief two-item questionnaire and followed, if positive, by validated tools such as the General Anxiety Disorder-7 (GAD-7) scale or Patient Health Questionnaire-9 (PHQ-9). Screening should occur after a new diagnosis or cardiovascular event, at annual follow-up, and whenever prompted by clinical judgement.

Management follows a stepped care model. Non-pharmacological approaches form the foundation, including improved communication, psycho-education, social prescribing, lifestyle interventions, and psychological therapies such as cognitive behavioural therapy or exposure therapy. Pharmacological treatment is reserved for moderate-to-severe cases and must be guided by mental health specialists. Overuse of anxiolytics and sedatives is discouraged; antidepressants may be

considered for depression and anxiety, but in heart failure are reserved for severe depression only.

Finally, special attention is paid to severe mental illness, often underdiagnosed and stigmatised, but the treatment of which reduces CVD risk. Given the metabolic and arrhythmic side effects of many antipsychotics, recommendations include monitoring cholesterol, glucose, and QTc intervals, with clear thresholds for discontinuation. Finally, sex, gender, and age-specific factors are addressed, acknowledging higher risks in women, challenges for transgender patients, and the burden of mental health conditions in older populations with comorbidities.

VALVULAR HEART DISEASE

The 2025 ESC/European Association for Cardio-Thoracic Surgery (EACTS) Guidelines for the management of valvular heart disease (VHD),[5] developed by a 25-member task force including two patients with VHD, emphasise a patient-centred, shared decision-making approach underpinned by regional Heart Valve Networks and dedicated Heart Teams. These teams, made up of cardiologists, surgeons, interventionalists, and imaging specialists, ensure that complex cases are managed in high-volume expert centres, reflecting the robust relationship between procedural volume and outcomes. Clear communication with patients, referring cardiologists, and general practitioners is central to this model of care.

A major theme is the central role of multimodality imaging in diagnosis, risk stratification, and procedural planning. Transthoracic and transoesophageal echocardiography, cardiac CT, and CMR provide complementary insights into valve anatomy, left ventricular (LV) volumes and function, and aortic dimensions. CT is now particularly emphasised for assessing coronary artery disease ahead of intervention.

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Imaging directly informs treatment strategy: in aortic regurgitation, LV volumes and aortic root geometry guide surgical repair or replacement; in aortic stenosis, an integrated assessment of gradients, valve area, calcification, and LV function defines severity and determines suitability for surgery or transcatheter aortic valve implantation; and in mitral and tricuspid disease, 3D echocardiography and CMR enhance quantification, mechanism identification, and procedural planning.

The guidelines also extend recommendations to complex and subspecialty populations, including patients with cancer, prior radiation, cardiogenic shock, acute heart failure, and mixed valvular disease, alongside sex-specific considerations. Across all lesions, management now balances symptom burden, cardiac damage, procedural risk, and lifetime planning with multimodality imaging and structured Heart Teams at the centre of contemporary VHD care.

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