European Heart Journal Open (2026) **6**, oeag074
https://doi.org/10.1093/ehjopen/oeag074

EDITORIAL

First quinquennium completed: highlights from *EHJ Open* 2025

Magnus Bäck [1,2,3,4,*], Maciej Banach[5,6], Frieder Braunschweig[1,7], Salvatore De Rosa[8], Frank A. Flachskampf[9], Thomas Kahan[10,11], Daniel FJ Ketelhuth[12], Patrizio Lancellotti[13], Susanna C. Larsson[14,15], Linda Mellbin[1,2], Gianluigi Savarese[16], Annette Schophuus Jensen[17], Karolina Szummer[1,7], and Denis Wahl[3,4]; European Heart Journal Open Section Editors

[1]Department of Cardiology, Heart and Vascular Center, 17177 Karolinska University Hospital, Stockholm, Sweden; [2]Department of Medicine, Solna, Karolinska Institutet, 17177 Stockholm, Sweden; [3]Inserm, DCAC, Université de Lorraine, Nancy 54000, France; [4]Centre Hospitalier Régional Universitaire de Nancy, 54500 Vandoeuvre-lès-Nancy, France; [5]Faculty of Medicine, The John Paul II Catholic University of Lublin, Lublin, Poland; [6]Department of Preventive Cardiology and Lipidology, Medical University of Lodz and Polish Mother's Memorial Hospital Research Institute, Lodz, Poland; [7]Department of Medicine Huddinge, Karolinska Institutet, Stockholm, Sweden; [8]Department of Medical and Surgical Sciences, Magna Graecia University of Catanzaro, Catanzaro, Italy; [9]Divisions of Clinical Physiology and Cardiology, Uppsala University Clinic, and the Department of Medical Sciences, Uppsala University, Uppsala, Sweden; [10]Department of Cardiology, Danderyd University Hospital, Stockholm, Sweden; [11]Department of Clinical Sciences, Danderyd Hospital, Karolinska Institutet, Stockholm, Sweden; [12]Department of Molecular Medicine, University of Southern Denmark, Odense, Denmark; [13]GIGA Cardiovascular Sciences, Centre Hospitalier Universitaire Sart Tilman, University of Liège Hospital, Liège, Belgium; [14]Unit of Cardiovascular and Nutritional Epidemiology, Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden; [15]Medical Epidemiology, Department of Surgical Sciences, Uppsala University, Sweden; [16]Department of Clinical Science and Education, Södersjukhuset, Stockholm, Sweden; and [17]Rigshospitalet, Copenhagen University Hospital, Copenhagen, Denmark

In this editorial, the Editors present some of the scientific highlights from the past year that, in different ways, illustrate the breadth, diversity, and ongoing momentum of *EHJ Open*. These examples are not intended as an exhaustive catalogue of all the exceptional work published over the year but rather serve as a representative reflection of the journal's scientific scope and its place in today's cardiology landscape. Since many equally important contributions are not included here, we invite you to fully explore the journal's content, which is all open access and available to all.

Structural heart disease and valve innovation

Recent advances in structural heart disease that were published in *EHJ Open* last year highlighted a deepened integration of imaging, biology, genetics, and clinical decision-making.

Valvular heart disease is a fast-evolving branch of interventional cardiology, driven by innovation and cumulating clinical evidence. The timing of intervention in asymptomatic severe aortic stenosis is one of the topics for which benefits in truly low-risk individuals remain nuanced and require individualized interpretation.[1] After the EARLY TAVR trial showing that earlier intervention in asymptomatic severe aortic stenosis reduced major cardiovascular events by 50%,[2] current ESC/EACTS Guidelines state that intervention should be considered in asymptomatic severe, high-gradient AS with preserved LVEF as an alternative to close active surveillance when procedural risk is low.[3]

Findings from the Atherosclerosis Risk in Communities (ARIC) study[4] reported on associations of ankle brachial index (ABI), a marker of subclinical atherosclerosis, with coronary artery and extra-coronary vascular and valvular calcification in 1420 older participants.[5] A low ABI (≤0.9) had the strongest association with coronary calcium calcification and weakest with cardiac valve calcification, whereas a high ABI (≥1.3) tended to be more strongly associated with valvular calcification than with vascular calcification.[5] This suggests distinct pathophysiology of calcification across vascular beds and cardiac valves.[6] For the future perspectives in this area, medical treatments for aortic stenosis to control disease progression are now moving forward into true translation of experimental and observational studies into clinical trials.[7] The vitamin K-dependent matrix Gla-protein prevents calcium phosphate precipitation and crystallization and anticoagulant vitamin K antagonists have been associated with valvular calcifications, thereby raising the notion of vitamin K to prevent valvular calcification.[8] The randomized clinical trial PASSPORT evaluates vitamin K1 supplementation as a potential disease-modifying therapy for non-severe calcific aortic stenosis using CT-based quantification of valve calcium as the primary endpoint.[9] This opens up for novel avenues towards a long-awaited effective medical therapy to complement the present interventional solutions.

The opinions expressed in this article are not necessarily those of the Editors of the *European Heart Journal Open* or of the European Society of Cardiology.

* Corresponding author. Tel: +46 08 123 70 00, Email: Magnus.Back@ki.se

© The Author(s) 2026. Published by Oxford University Press on behalf of the European Society of Cardiology.
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (https://creativecommons.org/licenses/by-nc/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact reprints@oup.com for reprints and translation rights for reprints. All other permissions can be obtained through our RightsLink service via the Permissions link on the article page on our site—for further information please contact journals.permissions@oup.com.

Downloaded from academic.oup.com/ehjopen/article/6/2/oeag074/8678688 by guest on 30 October 2026

A complete understanding of pathophysiological process and the identification of future therapeutic targets need to be taken into consideration because of the spatial heterogeneity of valvular disease-driving procceses.[10] To this end, combining CUBIC and SWITCH histological techniques[11] allows to render of calcified tissues transparent.[12] Application of the latter protocol to human calcified aortic valves revealed organized and heterogeneous valvular neuronal networks,[12] which represents a previously inaccessible anatomical layer for morphological analyses that expands the valvular pathobiology to neuro-immune biology.

Beyond the aortic valve, structural interventions for mitral regurgitation were clarified in a comprehensive meta-analysis comparing surgical mitral valve repair with mitral transcatheter edge-to-edge repair (m-TEER). Although mortality was comparable, surgery was associated with lower rates of heart failure rehospitalization and significantly fewer mitral valve reinterventions.[13] Finally, LTBP2 mutations were shown in both humans and mice to drive myxomatous mitral valve degeneration via dysregulated TGF-β signalling,[14] providing a clear molecular anchor for future perspectives in mitral regurgitation in addition to current precision strategies, advanced imaging, and novel transcatheter technologies.

Cardio-oncology complexities of bleeding risk in antithrombotic treatments

The Special Cardio-oncology Article Collection in the fifth volume of *EHJ Open* covered a breadth of how malignancies and their treatments may reshape both acute and chronic cardiovascular trajectories, as previously highlighted.[15] One of todays' major cardio-oncological challenges is the bleeding risk, which may represent a key clinical determinant guiding antithrombotic decisions.[16] Among patients admitted for STEMI receiving percutaneous coronary intervention in the UK between 2005 and 2019, cancer conferred a 50% increased risk of major bleeding compared with non-cancer patients after adjustment for baseline differences, pointing to mitigating bleeding risk in STEMI with cancer is of paramount importance to improve outcomes.[17] Complementing these findings, adding cancer as a binary variable to the five-point PRECISE-DAPT score[18] was recently shown to improve its discrimination ability.[19] In the first external validation cohort however, although PRECISE-DAPT Cancer Score categorized more cancer patients at high bleeding risk, this resulted in only marginal improvement for the discrimination of bleeding events compared with the original PRECISE-DAPT score without taking cancer into consideration.[20]

Inflammation and its resolution

In atherosclerotic cardiovascular disease (ASCVD), a residual inflammatory risk may exceed cholesterol-related risk in patients treated with statins.[21] Consistent with this, a real-world analysis of 39 638 adults with ASCVD who underwent routine hsCRP and LDL-C testing showed that elevated inflammatory risk, either alone or in combination with high LDL-C, was a stronger predictor of adverse outcomes than elevated cholesterol alone.[22] Advances in inflammation biology have extended the role of specialized pro-resolving mediators beyond the resolution of ASCVD-associated inflammatory processes,[23] to showing a similar orchestrating role in cardiac healing.[24] Dysregulation of these lipid-derived pathways may lead to a pathophysiological shift from adaptive cardiac repair to progression into heart failure.[24] These findings position inflammation-resolution as a therapeutic frontier extending beyond traditional anti-inflammatory strategies.

Heart failure, cardiomyopathies, and arrhythmias

Heart failure and cardiomyopathy research published in the fifth volume of *EHJ Open* highlighted the increasingly complex interplay between inflammation, electrophysiology, and metabolic derangements. Electrophysiologic remodelling also emerged as a crucial determinant of heart failure trajectories. In patients with heart failure, atrial fibrillation was associated with impaired VO_2 peak, potentially due to reduced stroke volume and/or arterio-venous oxygen difference, reinforcing atrial fibrillation as not only a comorbidity but also a direct amplifier of heart failure severity and a potential target for earlier rhythm-control strategies in selected patients.[25] In adult congenital heart disease (ACHD), secondary hyperparathyroidism[26] emerged as a surprisingly common comorbidity, observed in nearly 15% across the spectrum of ACHD and most common in complex and more severe disease, particularly those with predominant right heart involvement in the CHD-HYPER-study.[27] The 2025 ESC Guidelines for the management of cardiovascular disease and pregnancy endorsed the modified WHO (mWHO) classification for risk stratification,[28] a recommendation which received support from contemporary national registry data demonstrating an association between higher mWHO class and adverse maternal and obstetric outcomes in women with ACHD.[29]

In summary, the articles highlighted in this editorial underline the importance of gathering all cardiology subspecialities in one common forum to not only connect basic science and clinical research but also illustrate common pathways, for example, connecting heart failure with arrhythmias, the inflammation paradigm in atherosclerosis, and valvular heart disease at the intersection with imaging, interventional cardiology, and genetics. Having completed its first quinquennium, *EHJ Open* now confidently steps towards the horizon of a decade.

Data availability

There are no new data associated with this article.

Author contributions

All authors (Writing—original draft, Writing—review & editing [lead])

Disclosure statement

All authors are part of the Editorial Board of *European Heart Journal Open*. The authors have no financial disclosures in relation to this work.

Acknowledgements

Volume 5 of *EHJ Open* has been completed with the invaluable help of the following Associate Editors, who have handled submissions during 2025:

Ana Almeida

Downloaded from academic.oup.com/ehjopen/article/6/2/oeag074/8678688 by guest on 30 October 2026

Marie-Luce Bochaton-Piallat
Mats Börjesson
Ronny Buechel
Emmanouil Charitakis
Arrigo Cicero
Domenico D'Amario
Christian de Chillou
Jérémy Fauconnier
Nicolas Girerd
Anders Gottsäter
Joerg Herrmann
Christian Jung
Stefan Koudstaal
Seth Martin
Edit Nagy
John Pernow
Davide Stolfo
Giuseppe Vergaro
Michal Zembala
Andre Zimerman

All editors of *EHJ Open* would like to thank those who reviewed papers for the journal. The peer reviewers who contributed to the Journal in 2025 are as follows:

Editorial board reviewers:
Harry Björkbacka
Haran Burri
Kevin Damman
Marat Fudim
Bruna Gigante
Patrick Lacolley
Gustavs Latkovskis
Sven-Christian Pawelzik
Veronique Regnault
Leyla Elif Sade Akdogan
Michael Shapiro
Marcus Ståhlberg
Arik Wolak

External reviewers:
Mani A. Vannan
Erika Aagaard
Assia Aajal
Mohamed Abdelhamid
Ryo Abe
Abdelmomen Abouborda
Elisabetta Abruzzese
Maurizio Acampa
Gareth Ackland
Dimitris Afendoulis
Siddharth Agarwal
Arian Aghilinejad
Malik Takreem Ahmad
Adam Ahmed
Alberto Aimo
Ibrahim Akin
Hyeon-Ju Ali
Baravan Al-Kassou
Till Althoff
Gökhan Alıcı
Matthew Ambrosio
Rafael Amorim Belo Nunes
Niels H. Andersen
Daniel Andersson
Giuseppe Ando'
Alessia Argiro
Matthew K. Armstrong
Amir Askarinejad
Morten Bækgaard Thomsen
Christian Bär
Hooman Bakhshi
Tosho Balabanski
Anna Baritussio
Ozcan Basaran
Cristina Basso
Akash Batta
Guillaume Baudry
Anıl Başkurt
Hans Christian Beck
Benedikt Beer
Maria Giulia Bellicini
Karim Benali
Alexander E. Berezin
Justine Bergeon
Jutta Bergler-Klein
Marco Bernardi
Matteo Bertini
Francesco Bianco
Maro Biffi
Giuseppe Biondi-Zoccai
Konstantinos Bitos
Ana Blasco
Aleš Blinc
Franck Boccara
Marton Boga
Laurent Bonello
Maria Bonsignore
Rasmus Borgquist
Josip Andelo Borovac
Alicja Bortkiewicz
Ilze Bot
John Bourke
Luisa Branco
Helge Brandberg
Axel Brandes
Ole Breithardt
Michele Brignole
Olof Broberg
Jasper Brugts
Natale Brunetti
Sergio Buccheri
Benjamin Buckley
Rebecca Burton
Gianluca Campo
Nicole Carabetta
Luis Miguel Cardoso Dos Santos
Thierry Carrel
Edina Cenko
Alberto Cereda
Dick C. Chan
Shih-Ann Chen
Qingui Chen
Yun-Yu Chen
Romain Chopart
Arrigo Cicero
Giuseppe Ciconte

Downloaded from academic.oup.com/ehjopen/article/6/2/oeag074/8678688 by guest on 30 October 2026

Thomas R. Cimato
Pascal Clephas
Sean Coffey
Stefano Coiro
Bernardo Cortese
Giorgio Costantino
JJ Coughian
Elaine Coutinho
Harry Crijns
Otilia Cristea
Michal Czapla
Mohamed Dafaalla
Ioana Cristina Daha
Anna Damlin
Richard Davis
Marzia De Bortoli
Victor de Ledinghen
Peter De leeuw
Annamaria Del Franco
Gabriele Dell'Era
Omar Dewidar
Tarvinder Dhanjal
Michele Di Mauro
Luigi Di Serafino
Borislav Dinov
Erwan Donal
Teodora Donisan
Nikola Drca
Daniel J. Drucker
David Duncker
Angela Durante
Dragos Duse
Brett Dyer
Maciej Dyrbuś
Mathieu Echivard
Betty Eipper
Sheref Elseidy
Francesco Fanelli
Alessandro Filippeschi
Thomas Fink
Matthias Fischer
Joseph Flynn
Luigi Formisano
Hidehira Fukaya
Shinya Furukawa
Mattias Götberg
Mattia Galli
Cosme García-García
Rodrigue Garcia
Xavier Garcia-Moll
Mario Gaudino
Davide Genovese
Francesco Gentile
Bijan Ghaleh-Marzban
Daniele Giacoppo
Anton Gisterå
Jens P. Goetze
Ana Gomes
Tommaso Gori
Shinya Goto
Felice Gragnano
Trisha Grevengoed
Chrysanthos Grigoratos
Eduard Guasch
Philippe Guerci
Norbert Guettler
Nicole Habel
Payam Haftbaradaran Esfahani
Camilla Hage
Nazha Hamdani
Dorela Haxhiademi
Holger Hein
Kevin Heist
Rayyan Hemetsberger
Johan Heritz
Jussi Hernesniemi
Gerd Heusch
Jochen Lukas Hilgendorf
Yoshitaka Hirooka
Joanna Hlebowicz
Katarzyna Holcman
Fortunato Iacovelli
Ignatios Ikonomidis
Yoshitaka Iwanaga
Jin Iwasawa
Allan Jaffe
Akhil Jain
Vikash Jaiswal
Martin Jansson
Ana Jelaković
Anders Jeppsson
Aravdeep Jhand
Juhani Junttila
Juliane Jurga
Wayne Kaesemeyer
Koray Kalenderoglu
Hannah Kentenich
Thorsten Kessler
Alexander Kharlamov
Alexander Kirsch
Umut Kocabaş
Stavros Konstantinides
Yuval Konstantino
Yosua Darmadi Kosen
Irina Kotlar
Mila Kovacevic
Andrew D. Krahn
Piotr Kulakowski
Toshiki Kuno
Jacob Lønborg
Renzo Laborante
Stephan Lange
Alf Inge Larsen
Carl Lavie
Thierry Le Tourneau
Seung-Yul Lee
Matthew M. Y. Lee
Orly Leiva
Isabella Leo
Carolin Lerchenmüller
Finn Olav Levy
Chee Woon Lim
Johan Ulrik Lind
Bertil Lindahl
Helena Lindberg
Felix Lindberg
Gregory Lip
Ioan Liuba
Mark Luedde
Pia Lundman

Downloaded from academic.oup.com/ehjopen/article/6/2/oeag074/8678688 by guest on 30 October 2026

Julian Müller
Cristina Madaudo
Pasquale Maffia
Michele Magnocavallo
Johannes Mair
Maan Malahfji
Guy Malkinson
Paolo Manca
Antonio Mangieri
Muhammad Talha Maniya
Masab Mansoor
Stephane Manzo-Silberman
Benjamin Marchandot
Michele Marchetta
Eloi Marijon
Steven M. Markowitz
Ahmad Masri
Finlay A. McAlister
David Messika-Zeitoun
Lars Michel
Desai Milind Y
Emilia Monteiro
Carlos Arturo Morillo
Marco Moscarelli
Sara Moscatelli
Francisco Moscoso Costa
Shunsuke Murata
Daud Mutahar
Jan Naar
Umbreen Nadeem
Sotirios Nedios
Jens Cosedis Nielsen
Muhammad Nizam
Alleh Nogueira
Vincenzo Nuzzi
Fredrik Nyström
Marish Oerlemans
Taishi Okuno
Brian Olshansky
Muhammed Bahadır Omar
Elmir Omerovic
Elena Osto
Marina M. Ostojic
Yihui Ou
Cécile Oury
Helmut Pürerfellner
Paolo Palatini
Nicolai Palstrøm
Francesco Paneni
Giuseppe Panuccio
Michael Papadakis
Andriana Papaioannou
Carlo Pappone
Elizabeth Paratz
Manan Pareek
Maria Concetta Pastore
Astrid Paul Nordin
Rita Pavasini
Natalia Pavon
Pauline Pearcy
Pierpaolo Pellicorri
Jonas Persson
Marcelo Petri
Gregory Piazza
Francois Picard
Marco Piccininni
Gianluigi Pironti
Arman Postadzhiyan
Alonzo Prata
Francesco Prati
Riccardo Proietti
Joao Ramos
Tripti Rastogi Gupta
Manuel Rattka
Elina Rautio
Dimitris Richter
Benoit Robaye
Vincenzo Rochira
Alfredo Rodriguez
Jolien Roos-Hesselink
Lars Rydén
Manel Sabaté
Jolanda Sabatino
Pierre Sabouret
Christian Salbach
John Sanderson
Pasquale Santangeli
Raul D. Santos
Gaetano Santulli
Serkan Saygi
Paolo Sciarrone
Shantanu Sengupta
Murat Sezer
Erdinc Sezgin
Bahira Shahim
Arman Shahriar
Chetan Shenoy
Mikio Shiba
Stephanie Sibley
Anwar Siddiqui
Antti Siika
Moa Simonssonn
Judith Sluimer
Alina Maria Smaranda
Erik Ekker Solberg
Philipp Sommer
Jonas Spaak
Torkel Steen
Lee Sterling
Robert Storey
Antonio Strangio
Gaspard Suc
Tadafumi Sugimoto
Atsushi Sugiura
Alexander Sullivan
Praveena Sunkara
Richard Sutton
Saeko Takahashi
Ju Tan
Neville Tan
Hongwei Tan
Susumu Tao
Jean-Claude Tardif
Julie Tarp
Rene Tavernier
Rod Taylor
Andrew Teh
Dominic Theuns
Holger Thiele
Ulf Thilén

Downloaded from academic.oup.com/ehjopen/article/6/2/oeag074/8678688 by guest on 30 October 2026

Roland Tilz
Ana Teresa Timoteo
Tomasz Tokarek
José María Tolosana
Daniela Tomasoni
Peter Toth
Karin Tran-Lundmark
Gal Tsaban
Grigorios Tsigkas
Chukwuemeka Umeh
Mileen van de Kar
ErikVan Iterson
Richard S. Vander Heide
Bart Velders
Gruschen R. Veldtman
Kevin Vernooy
Alessandro Villaschi
Ada Visentini
F.L.J. Visseren
Konstantinos Vlachos
Arnold von Eckardstein
Håkan Wallén
Anne Wang Gottlieb
Michael A. Weber
Martin Wilkins
Roger Winkle
Jonas Wixner
Christopher Woods
Xinzhou Xie
Masahiro Yamamoto
In-Ho Yang
Di Yang
Derek M. Yellon
Zhichao Zhou
Li Ziang
Andreas Zietzer

Conflict of interest: None declared.

Funding

None.

References

1. Lancellotti P, Coisne A, Cosyns B, Dulgheru R, Garbi M, Hong G-R, Hanzevacki JS, Moscarelli M, Sugimoto T, Donal E, Fattouch K, Habib G, Vannan M, Pibarot P. Early aortic valve intervention in asymptomatic severe aortic stenosis: a clinical dilemma in evolution. *Eur Heart J Open* 2025;**5**:oeaf114.
2. Genereux P, Schwartz A, Oldemeyer JB, Pibarot P, Cohen DJ, Blanke P, Lindman BR, Babaliaros V, Fearon WF, Daniels DV, Chhatriwalla AK, Kavinsky C, Gada H, Shah P, Szerlip M, Dahle T, Goel K, O'Neill W, Sheth T, Davidson CJ, Makkar RR, Prince H, Zhao Y, Hahn RT, Leipsic J, Redfors B, Pocock SJ, Mack M, Leon MB. Transcatheter aortic-valve replacement for asymptomatic severe aortic stenosis. *N Engl J Med* 2025;**392**:217–227.
3. Praz F, Borger MA, Lanz J, Marin-Cuartas M, Abreu A, Adamo M, Ajmone Marsan N, Barili F, Bonaros N, Cosyns B, De Paulis R, Gamra H, Jahangiri M, Jeppsson A, Klautz RJM, Mores B, Pérez-David E, Pöss J, Prendergast BD, Rocca B, Rossello X, Suzuki M, Thiele H, Tribouilloy CM, Wojakowski W; ESC/EACTS Scientific Document Group. 2025 ESC/EACTS guidelines for the management of valvular heart disease. *Eur Heart J* 2025;**46**:4635–4736.
4. The ARIC investigators. The Atherosclerosis Risk in Communities (ARIC) study: design and objectives. *Am J Epidemiol* 1989;**129**:687–702.
5. Bansah EC, Ejiri K, Kim E, Mok Y, Cainzos-Achirica M, Tanaka H, Howard-Claudio CM, Butler KR, Hughes TM, Van't Hof JR, Meyer ML, Blaha MJ, Matsushita K. Association of ankle-brachial Index with coronary and extracoronary calcification in older adults: ARIC study. *Eur Heart J Open* 2025;**5**:oeaf133.
6. Petri MH, Haftbaradaran Esfahani P, Plunde O, Bäck M. Decoding the ankle-brachial index in peripheral artery disease: coronary versus valvular calcification. *Eur Heart J Open* 2025;**5**:oeaf134.
7. Blaser MC, Bäck M, Luscher TF, Aikawa E. Calcific aortic stenosis: omics-based target discovery and therapy development. *Eur Heart J* 2025;**46**:620–634.
8. Bäck M, Michel JB. From organic and inorganic phosphates to valvular and vascular calcifications. *Cardiovasc Res* 2021;**117**:2016–2029.
9. Courtney WA, Walker J, Dorai-Raj A, Gilbert T, Rajwani A, Bellinge JW, Hodgson JM, Hillis GS, Schultz CJ. Testing if vitamin K1 reduces the progression of non-severe calcific aortic stenosis: design and rationale of the Prevention of Aortic Stenosis Progression Phylloquinone Ossification Reduction Trial (PASSPORT). *Eur Heart J Open* 2025;**5**:oeaf144.
10. Schlotter F, Halu A, Goto S, Blaser MC, Body SC, Lee LH, Higashi H, DeLaughter DM, Hutcheson JD, Vyas P, Pham T, Rogers MA, Sharma A, Seidman CE, Loscalzo J, Seidman JG, Aikawa M, Singh SA, Aikawa E. Spatiotemporal multi-omics mapping generates a molecular atlas of the aortic valve and reveals networks driving disease. *Circulation* 2018;**138**:377–393.
11. Tainaka K, Murakami TC, Susaki EA, Shimizu C, Saito R, Takahashi K, Hayashi-Takagi A, Sekiya H, Arima Y, Nojima S, Ikemura M, Ushiku T, Shimizu Y, Murakami M, Tanaka KF, Iino M, Kasai H, Sasaoka T, Kobayashi K, Miyazono K, Morii E, Isa T, Fukayama M, Kakita A, Ueda HR. Chemical landscape for tissue clearing based on hydrophilic reagents. *Cell Rep* 2018;**24**:2196–2210.e2199.
12. Bergeon J, Hupin D, Hu J, Le Guyader S, Franco-Cereceda A, Bäck M. 3D immunolabelling of human aortic valves by optimized CUBIC tissue clearing and its application for neural mapping in aortic stenosis. *Eur Heart J Open* 2026;**6**:oeaf156.
13. Di Pietro G, Improta R, Lattanzio A, Roscioli A, Birtolo LI, Tocci M, Colantonio R, Sardella G, Fedele S, Pavone N, Saade W, Miraldi F, Mancone M. Mitral Transcatheter edge-to-edge repair rivals surgery for survival despite less complete correction: a systematic review and metanalysis of randomized and propensity score matching studies. *Eur Heart J Open* 2025;**5**:oeaf135.
14. Shpitzen S, Rosen H, Ben-Zvi A, Meir K, Levin G, Gudgold A, Ben Dor S, Haffner R, Zwas DR, Leibowitz D, Slaugenhaupt SA, Banin E, Mizrachi R, Obolensky A, Levine RA, Gilon D, Leitersdorf E, Tessler I, Reshef N, Durst R. Characterization of LTBP2 mutation causing mitral valve prolapse. *Eur Heart J Open* 2025;**5**:oeae106.
15. Herrmann J. Advance at a glance: contributions to cardio-oncology. *Eur Heart J Open* 2025;**5**:oeaf075.
16. Lyon AR, Lopez-Fernandez T, Couch LS, Asteggiano R, Aznar MC, Bergler-Klein J, Boriani G, Cardinale D, Cordoba R, Cosyns B, Cutter DJ, de Azambuja E, de Boer RA, Dent SF, Farmakis D, Gevaert SA, Gorog DA, Herrmann J, Lenihan D, Moslehi J, Moura B, Salinger SS, Stephens R, Suter TM, Szmit S, Tamargo J, Thavendiranathan P, Tocchetti CG, van der Meer P, van der Pal HJH; ESC Scientific Document Group. 2022 ESC Guidelines on cardio-oncology developed in collaboration with the European Hematology Association (EHA), the European Society for Therapeutic Radiology and Oncology (ESTRO) and the International Cardio-Oncology Society (IC-OS). *Eur Heart J* 2022;**43**:4229–4361.
17. Dafaalla M, Costa F, Jia H, Wijeysundera H, Rashid M, Graham MM, Wojakowski W, Chieffo A, Mintz GS, Mamas MA. Ischaemic and bleeding risk after ST-elevation myocardial infarction in patients with active cancer: a nationwide study. *Eur Heart J Open* 2025;**5**:oeaf012.
18. Costa F, van Klaveren D, James S, Heg D, Raber L, Feres F, Pilgrim T, Hong M-K, Kim H-S, Colombo A, Steg PG, Zanchin T, Palmerini T, Wallentin L, Bhatt DL, Stone GW, Windecker S, Steyerberg EW, Valgimigli M. Derivation and validation of the predicting bleeding complications in patients undergoing stent implantation and subsequent dual antiplatelet therapy (PRECISE-DAPT) score: a pooled analysis of individual-patient datasets from clinical trials. *Lancet* 2017;**389**:1025–1034.
19. Dafaalla M, Costa F, Kontopantelis E, Araya M, Kinnaird T, Micari A, Jia H, Mintz GS, Mamas MA. Bleeding risk prediction after acute myocardial infarction-integrating cancer data: the updated PRECISE-DAPT cancer score. *Eur Heart J* 2024;**45**:3138–3148.
20. von Koch S, Mamas MA, Dafaalla M, Costa F, Koul S, Jernberg T, Erlinge D, Mohammad MA. Prediction of major bleeding events for patients with dual antiplatelet therapy after myocardial infarction-a validation of the PRECISE-DAPT cancer score. *Eur Heart J Open* 2025;**5**:oeaf137.
21. Ridker PM, Bhatt DL, Pradhan AD, Glynn RJ, MacFadyen JG, Nissen SE; PROMINENT, REDUCE-IT, and STRENGTH Investigators. Inflammation and cholesterol as predictors of cardiovascular events among patients receiving statin therapy: a collaborative analysis of three randomised trials. *Lancet* 2023;**401**:1293–1301.
22. Mazhar F, Capodanno D, Hjemdahl P, Sjolander A, Gerward S, Mathisen J, Plunde O, Kunadian V, Jernberg T, Carrero J-J. Inflammatory and cholesterol

Downloaded from academic.oup.com/ehjopen/article/6/2/oeag074/8678688 by guest on 30 October 2026

risks and rates of major cardiovascular events among patients with atherosclerotic cardiovascular disease in routine care. *Eur Heart J Open* 2026;**6**:oeag023.
23. Bäck M, Yurdagul A Jr, Tabas I, Oorni K, Kovanen PT. Inflammation and its resolution in atherosclerosis: mediators and therapeutic opportunities. *Nat Rev Cardiol* 2019;**16**:389–406.
24. Halade GV, Bäck M, Kain V. Inflammation-resolution signalling in cardiac repair, remodelling, and heart failure. *Eur Heart J Open* 2025;**5**:oeaf157.
25. Schmid V, Foulkes SJ, Dziano JK, Wang J, Verwerft J, Elliott AD, Haykowsky MJ. The impact of atrial fibrillation on oxygen uptake and haemodynamics in patients with heart failure: a systematic review and meta-analysis. *Eur Heart J Open* 2025;**5**:oeaf003.
26. Fraser WD. Hyperparathyroidism. *Lancet* 2009;**374**:145–158.
27. Loffler F, Garlichs JC, Linhorst K, Silber-Peest AS, Uehlein S, Leitolf H, Terkamp C, Deterding K, Bauersachs J, Westhoff-Bleck M. Secondary hyperparathyroidism in adult congenital heart disease: the CHD-HYPER-study. *Eur Heart J Open* 2025;**5**:oeaf141.
28. De Backer J, Haugaa KH, Hasselberg NE, de Hosson M, Brida M, Castelletti S, Cauldwell M, Cerbai E, Crotti L, de Groot NMS, Estensen M-E, Goossens ES, Haring B, Kurpas D, McEniery CM, Peters SAE, Rakisheva A, Sambola A, Schlager O, Schoenhoff FS, Simoncini T, Steinbach F, Sudano I, Swan L, Valente AM; ESC Scientific Document Group. 2025 ESC Guidelines for the management of cardiovascular disease and pregnancy. *Eur Heart J* 2025;**46**:4462–4568.
29. Jonsson S, Johansson B, Wikstrom AK, Dahlqvist JA, Christersson C, Sorensson P, Trzebiatowska-Krzynska A, Dellborg M, Thilén U, Sundström-Poromaa I, Bay A. The modified WHO class is associated with maternal complications in women with congenital heart disease. *Eur Heart J Open* 2025;**5**:oeaf081.

Downloaded from academic.oup.com/ehjopen/article/6/2/oeag074/8678688 by guest on 30 October 2026