

Criteria for recommendation and expert consensus papers: from the European Association of Cardiovascular Imaging Scientific Documents Committee

Thor Edvardsen^{1*}, Nuno Cardim², Bernard Cosyns³, Victoria Delgado⁴, Erwan Donal⁵, Raluca Dulgheru⁶, Maurizio Galderisi⁷, Kristina H. Haugaa¹, Philipp A. Kaufmann⁸, Patrizio Lancellotti^{6,9}, Massimo Lombardi¹⁰, Denisa Muraru¹¹, Sven Plein¹², Gerald Maurer¹³, Bogdan A. Popescu¹⁴ and Gilbert Habib¹⁵ on behalf of the EACVI Scientific Documents Committee

¹Department of Cardiology, Oslo University Hospital and University of Oslo, Oslo, Norway; ²Multimodality Cardiac Imaging Department, Hospital da Luz, Lisbon, Portugal; ³Department of Cardiology, Centrum voor Hart-en Vaatziekten, Universitair Ziekenhuis Brussel, Brussel, Belgium; ⁴Department of Cardiology, Leiden University Medical Center, Leiden, The Netherlands; ⁵Cardiology and CIC-IT 1414; CHU Rennes & LTSI, Inserm 1099, Université Rennes-1, Rennes, France; ⁶University of Liège Hospital, GIGA Cardiovascular Sciences, Departments of Cardiology, Heart Valve Clinic, CHU Sart Tilman, Liège, Belgium; ⁷Department of Advanced Biomedical Sciences, Federico II University Hospital, Naples, Italy; ⁸Department of Nuclear Medicine, Cardiac Imaging, University Hospital Zurich, Zurich, Switzerland; ⁹Gruppo Villa Maria Care and Research, Anthea Hospital, Bari, Italy; ¹⁰Pomultimodality Cardiac Imaging Section, Policlinico San Donato, Milan, Italy; ¹¹Department of Cardiac, Thoracic and Vascular Sciences, University of Padua, Padua, Italy; ¹²Multidisciplinary Cardiovascular Research Centre & Leeds Institute of Cardiovascular and Metabolic Medicine, University of Leeds, Leeds, UK; ¹³Division of Cardiology, Department of Internal Medicine II, Medical University of Vienna, Vienna, Austria: ¹⁴University of Medicine and Pharmacy 'Carol Davila'—Euroecolab, Institute of Cardiovascular Diseases, Bucharest, Romania; and ¹⁵Department of Cardiology, La Timone Hospital, Bd Jean Moulin, Marseille 13005, France

Online publish-ahead-of-print 3 August 2016

The recommendations given in this document are intended as a guide for the writing committees with the aim to harmonize the style and content of EACVI expert consensus and recommendation documents.

Keywords

recommendations • guidelines • expert consensus • EACVI

The future depends on what you do today.

M. Gandhi

The European Association of Cardiovascular Imaging (EACVI) is committed to maintaining the highest standards of professional excellence in all aspects of cardiovascular imaging. The mission of the EACVI is to promote excellence in clinical diagnosis, research, technical development, and education in cardiovascular imaging with a particular focus on education, training, scientific initiatives, and research. The EACVI Scientific Documents Committee has a particular responsibility for recommendation paper and expert consensus development. These documents aim to summarize consensus and adjudicate in areas of disagreement in the field of cardiovascular imaging, allowing distribution of the best possible guidance and orientations to practising physicians. The EACVI publishes single modality recommendations but will increasingly focus on multimodality

imaging with the first multimodality recommendation paper published in 2013.¹ The EACVI Scientific Documents Committee also collaborates on joint recommendations publications with other associations, working groups, or councils in the European Society of Cardiology such as the European Heart Rhythm Association (EHRA),² Acute Cardiovascular Care Association (ACCA),³ and the Council on Hypertension as well as international sister societies such as the American Society of Echocardiography^{4–6} and others.⁷

The EACVI is dedicated to securing the highest scientific and professional standards in all its activities. The current document summarizes the EACVI's standards for planning (*Table 1*) and writing of recommendation or expert consensus paper (*Table 2*). The EACVI Scientific Committee and the EACVI Board approved these rules in 2016.

The title containing the phrase 'EACVI recommendation paper' indicates that the given recommendations have solid evidence in

^{*} Corresponding author. Tel: +004740204447; Fax: +47 23 07 13 97. E-mail: thor.edvardsen@medisin.uio.no

Published on behalf of the European Society of Cardiology. All rights reserved. © The Author 2016. For permissions please email: journals.permissions@oup.com.

Table I Planning of a new recommendation/expert consensus paper

- The EACVI Scientific Committee decides on the need to update or develop new version of guidelines, the topics as well as the title, definition, and possible cooperation with other associations or working groups.
- The EACVI President and Chair of the EACVI Scientific Committee elect the Task Force chairperson(s) and, in collaboration with him/her/them, create a list of Task Force members and identify potential collaborations with other associations, working groups and councils, and scientific societies.
- The criteria to chair a Task Force are: recognized expertise in the field with a record of at least one important paper in that specific topic. He or she must have an accumulated impact factor of >250 and an H-index of >20.
- The criteria for being selected as a co-author in a Task Force are at least one of the following: proven expertise (scientific publications in the area), coordination of cardiac imaging associations or study groups in national societies related to the field, and major personal clinical experience.
- At least four persons from the EACVI Board/Scientific Committee must be members of the Task Force.
- The EACVI Scientific Committee will approve the Task Force member list.
- Official Task Force list validated by Chair of the EACVI Scientific Committee, with table of contents and timelines.
- A final approval of the topic, table of contents, and members of the Task Force is needed by the ESC Committee for Practical Guidelines (CPG).
- The official invitation and declaration of interest (DOI) form will be sent to potential Task Force members by the EACVI Scientific Chair.
- Document elaboration (via meetings, emails, teleconferences, web-boards) and a detailed timetable to develop and publish the document.
- Chairpersons send the final draft to review by the EACVI Scientific Committee.
- EACVI Scientific Committee, ESC Entities (from ESC Associations, Working Groups, and Councils), external reviewers and national societies experts, read and comment on the document.
- Guidelines endorsement forms are sent to national societies and/or working groups of non-invasive imaging.
- Comments must be integrated into the document, and the next draft must be produced (several rounds possible). Final draft approval by the Task Force and submitted to the EACVI Scientific Committee for publication approval.
- Final draft officially approved for publication by the EACVI Scientific Committee.
- Final approved draft sent to the Editor-in-Chief of European Heart Journal Cardiovascular Imaging (EHJ-CI) and other journals in case of joint publication.
- Recommendations published online and in EHJ-CI and other journals in case of joint publication.
- Beginning of implementation programme, i.e. implementation meetings, joint sessions at ESC National Societies Annual Congresses, translations of EACVI recommendations and Abridged recommendations, EACVI app, newsletters, etc.

Table 2 Writing a recommendation/expert consensus paper

- The title must contain EACVI and the phrases, recommendations, or expert consensus.
- The paper must have a table of contents.
- The abstract must reflect the main message of the paper.
- The introduction should be short and concise.
- The paper may include educational content about the disease but should be short and concise.
- Inclusion of educational content about the imaging method is OK.
- The paper should NOT be written as a review paper.
- Try to keep the document short.
- · Avoid repetitions.
- Grammar style—write in present.
- $\bullet \ \ \text{A `summary box' with key points at the end of each important section including recommendations is highly recommended.}$
- Include specific cut-off values—do not write general terms.
- The content should fit with the EACVI core syllabus.⁸
- The paper should contain clear answers and guidelines.
- Pitfalls are welcomed if relevant for the topic.
- Chair responsibility: writing style must be homogenous.
- References should be maximum 120.
- Recommendations should be checked for consistency with other ESC-EACVI guidelines published <2 years. If there is a strong reason for discrepancy (new evidence or new opinion), the change in recommendation should be highlighted and justified.
- Add flow charts on how to use the imaging modalities of first choice in the specific condition.
- List 10–15 topics as the most important recommendations at the end of the paper—'to do or not to do'
- Conclusions should reflect what is considered correct—give the correct opinion.
- Use high-quality figure panels as a complement of the content, by illustrating practical tips, spectrum of imaging findings or pitfalls, rather than as generic
 examples of the various imaging techniques.
- $\bullet~$ It is suggested to add examples (including movie files) as supplementary files.
- A slide set is welcomed and will further increase the utility of the recommendations.

the scientific literature. An Expert consensus paper has less evidence supporting the advice given, but the EACVI Scientific Documents Committee believes that the topic is important and that an expert consensus paper will be very useful and will help clinical

practice. The term position paper will be reserved for special statements.

The EACVI's Abridged recommendations are shortened versions of the EACVI recommendations papers. The format has been

1100 T. Edvardsen et al.

carefully selected and designed for practitioners who require an easy-to-read, quick-access version in their daily practice to consult the latest recommendations in the field of cardiovascular imaging. There are currently nine abridged titles with three new titles being produced each year, and the titles are chosen by special invitation among the latest published scientific documents. Copies are available for purchase at all major conferences by the EACVI team and online.

The recommendations given in this document are intended as a guide for the writing committees during the planning and writing process with the aim to harmonize the style and content of EACVI scientific documents. They provide clear instructions, and each point must be respected by the Task Force authors and by the reviewers of recommendation and expert consensus papers.

The scientific documents published by the EACVI will present relevant evidence on important clinical topics to guide physicians and others working with cardiac imaging to weigh the benefits and risks of a particular diagnostic or therapeutic procedure. The documents are meant to be helpful in everyday clinical decision-making.

Conflict of interest: None declared.

References

 Lancellotti P, Nkomo VT, Badano LP, Bergler-Klein J, Bogaert J, Davin L et al. European Society of Cardiology Working Groups on Nuclear Cardiology and Cardiac Computed Tomography and Cardiovascular Magnetic Resonance, American Society of Nuclear Cardiology, Society for Cardiovascular Magnetic Resonance, Society of Cardiovascular Computed Tomography. Expert consensus for multi-modality

- imaging evaluation of cardiovascular complications of radiotherapy in adults: a report from the European Association of Cardiovascular Imaging and the American Society of Echocardiography. Eur Heart J Cardiovasc Imaging 2013;14:721–40.
- Donal E, Lip GYH, Galderisi M, Goette A, Shah D, Marwan M et al. EACVI/EHRA Expert Consensus Document on the role of multi-modality imaging for the evaluation of patients with atrial fibrillation. Eur Heart J Cardiovasc Imaging 2016;17: 355–83.
- Lancellotti P, Price S, Edvardsen T, Cosyns B, Neskovic AN, Dulgheru R et al.
 The use of echocardiography in acute cardiovascular care: recommendations of the European Association of Cardiovascular Imaging and the Acute Cardiovascular Care Association. Eur Heart J Cardiovasc Imaging 2015;16:119–46.
- Plana JC, Galderisi M, Barac A, Ewer MS, Ky B, Scherrer-Crosbie M et al. Expert consensus for multimodality imaging evaluation of adult patients during and after cancer therapy: a report from the American Society of Echocardiography and the European Association of Cardiovascular Imaging. Eur Heart J Cardiovasc Imaging 2014;15: 1063–93.
- Marwick TH, Gillebert TC, Aurigemma G, Chirinos J, Derumeaux G, Galderisi M et al. Recommendations on the use of echocardiography in adult hypertension: a report from the European Association of Cardiovascular Imaging (EACVI) and the American Society of Echocardiography (ASE). Eur Heart J Cardiovasc Imaging 2015; 16:577–605.
- Lang RM, Badano LP, Mor-Avi V, Afilalo J, Armstrong A, Ernande L et al. Recommendations for cardiac chamber quantification by echocardiography in adults: an update from the American Society of Echocardiography and the European Association of Cardiovascular Imaging. Eur Heart | Cardiovasc Imaging 2015;16:233-70.
- Badano LP, Miglioranza MH, Edvardsen T, Colafranceschi AS, Muraru D, Bacal F et al. European Association of Cardiovascular Imaging/Cardiovascular Imaging Department of the Brazilian Society of Cardiology recommendations for the use of cardiac imaging to assess and follow patients after heart transplantation. Eur Heart J Cardiovasc Imaging 2015;16:919–48.
- Cosyns B, Garbi M, Separovic J, Pasquet A, Lancellotti P, Education Committee of the European Association of Cardiovascular Imaging Association (EACVI). Update of the echocardiography core syllabus of the European Association of Cardiovascular Imaging (EACVI). Eur Heart J Cardiovasc Imaging 2013;14:837–9.