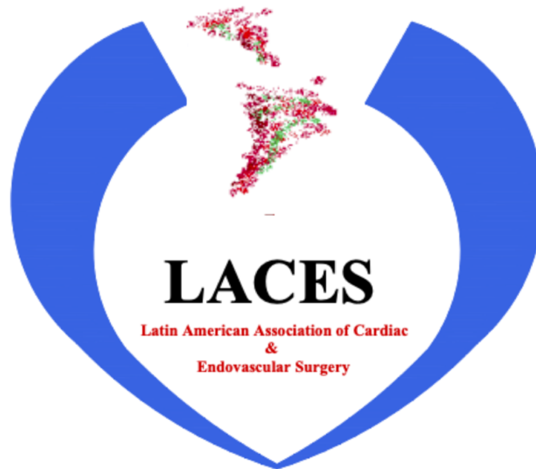


14th of December 2021

Dear Dr. Patrick T. O´Gara
Chair of the ACC/AHA Joint Committee,

On behalf of the Latin-American Association of Cardiac and Endovascular Surgery (LACES), we would like to congratulate the effort and work performed by the committee members in the honorary research and labor invested in drafting an updated guideline on Coronary Artery Revascularization. Our association appreciates the work involved in delivering guidance on this important topic. However, after careful reading, we find important evidence gaps and contradictions in the recommendations that will impact the treatment of millions of patients worldwide and for which our association has the obligation to make a public statement.

Management of stable angina represents the most important topic in the guideline considering that it is the entity with the highest prevalence. Therefore, chapter 7.1, which focuses on the impact of revascularization on survival in patients with stable ischemic heart disease (SIHD), represents, in our opinion, the most important chapter in the entire guideline. Moreover, among the different scenarios addressed, multivessel coronary artery disease (CAD) is the most important due to its unquestionable highest frequency.

The current writing committee decided to downgrade coronary artery bypass grafting (CABG) from a class of recommendation (COR) I to IIb for patients with multivessel CAD, giving the same recommendation as for percutaneous coronary intervention (PCI). The argument used by the authors was the following: *"The new Class IIb recommendation, which represents a downgrade from a Class I recommendation in the 2011 CABG guideline, reflects new evidence showing no advantage of CABG over medical therapy alone to improve survival in patients with 3-vessel CAD with preserved left ventricular (LV) function and no left main (LM) disease"*. Nonetheless, the authors show no additional randomized controlled trial (RCT) to reject the previous supportive evidence in favor of CABG on this topic (e.g., the Individual Patient Data

meta-analysis by *Yusuf et al*. and the European Coronary Surgery Study Group randomized control trial). Furthermore, the committee disregarded data from the Ten-year follow-up survival of the Medicine, Angioplasty, or Surgery Study (MASS II) randomized control trial, which showed a lower incidence of cardiac mortality (as part of its secondary outcomes) following CABG compared to optimal medical therapy and PCI.

The 4th top take-home message from the guidelines states: *"Updated evidence from contemporary trials supplement older evidence with regard to mortality benefit of revascularization in patients with stable ischemic heart disease, normal left ventricular ejection fraction, and triple-vessel coronary artery disease. Surgical revascularization may be reasonable to improve survival. A survival benefit with percutaneous revascularization is uncertain."* Furthermore, on page e27, the authors mention, *"Studies have shown that CABG confers a survival benefit over medical therapy in multiple subsets of patients, including those with left main CAD (Figure 6) (9-12), triple-vessel CAD (13), and ischemic cardiomyopathy (1,3-7,31-33) ... There are no RCTs that have demonstrated a survival advantage of PCI over medical therapy in patients with SIHD".* The text supporting the recommendation number 6 on PCI for patients with triple-vessel CAD states: "*The writing committee reviewed newer evidence and concluded that the ability of PCI to improve survival, compared with medical therapy alone in patients with multivessel CAD, remains uncertain. The recommendation, which reflects a weaker endorsement for PCI than for CABG in patients with multivessel CAD…"*

Evidently, there is a contradiction between the arguments and consideration of the evidence provided in the text and the current COR depicted in Table 2 and Figure 6. The text clearly considers the need to give "weaker endorsement for PCI," but the COR reflects otherwise. Furthermore, the authors neglected previous RCTs that have shown the survival benefit of CABG in these patients and decided to put PCI in the same COR, although no RCT has been able to show any survival advantage of PCI compared to optimal medical treatment.

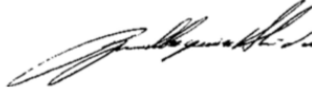
Considering that this section has the most significant impact due to the prevalence of SIHD in patients with multivessel CAD, such a contradiction may affect the lives and survival of millions of patients worldwide and have a major socio-economic impact.

Therefore, LACES respectfully but vehemently believes the Task Force should seriously reconsider the wording and recommendations in this specific large group of patients.

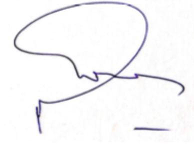
Our association therefore, publicly manifests its position against the mentioned chapter of the current guideline and hope for un urgent reconsideration.

Sincerely,

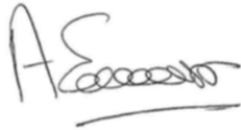
Dr.Victor Dayan
President of LACES



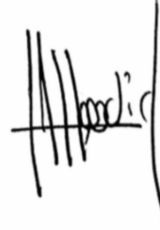
Dr. Rui M. S. Almeida
President Elect of LACES



Dr. Javier Ferrari
Vice-President of LACES

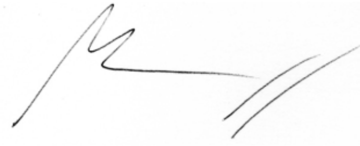


Dr. Alejandro Escobar
Secretary of LACES



Dr. Jose Antonio Heredia
Treasurer of LACES

Dr. Eduard Quintana
Interim International Representative



Dr. Mateo Marin-Cuartas
Residents representative