Reviewer's report

Title: Incremental value of contrast myocardial perfusion to detect intermediate versus severe coronary artery stenosis during stress-echocardiography.

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Reviewer: Rosa Sicari

Reviewer's report:

This is an interesting study addressing the diagnostic accuracy of vasodilator contrast stress echocardiography in subjects with intermediate stenosis. The methodology is appropriate, the results are sound and the conclusions believable. There are a few issues that authors should address:

1. In the methods section of the manuscript authors state that they have reported sensitivity, specificity according to standard definition and with the relative 95% CI. However, nowhere in the manuscript these values are reported. It is necessary that authors give the 95% CI to obtain statistical differences and not report it with the p value.

2. In the results section it is not clear the statement “.. lower prevalence of baseline EF” Please report in a more conventional way the difference of EF between the 2 groups.

3. The discussion section of the manuscript is a little too unfocused; particularly in the first part where authors discuss the prognostic significance of perfusion defects whereas the study is on the diagnostic accuracy of stress echocardiography in intermediate stenosis.

4. The clinical implications should be discussed. The loss of specificity in patients with significant CAD should indicate that conventional wall motion analysis is better than perfusion assessment. Then, authors should discuss the role contrast in the clinical practice. Moreover, there is no mention on the safety issue that has been raised on contrast and no mention to the costs, considering the suboptimal diagnostic performance.

5. Please discuss the role of microvascular dysfunction that may justify the perfusion defect in intermediate stenosis. Moreover, the lack of wall motion abnormalities, in this set of patients identifies subjects at low risk as demonstrated in several studies (DEFER etc.).

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

'I declare that I have no competing interests'