

Reviewer 1:

The authors would like to thank the reviewer for the objective analysis and constructive criticism. It is the authors' hope that the incorporated changes have resulted in an improved and more readable manuscript. Two identical versions of the updated manuscript have been submitted: one has changes highlighted in red (track changes ON) and the other is the updated version with track changes accepted. The line numbers in this response document refer to the line numbers in the version with track changes ON. Below, the reviewer comments have been italicized, followed by the authors' response in standard font.

This study is dealing with the hypothesis that pressure drop coefficient , a combined pressure-flow parameter will result in better clinical outcomes for patients with microvascular disease in comparison with FFR. The concept of CDP is rather new and not routinely used in the cathlab thus the study is interesting, relatively new, but rather complex parameter for daily practice.

Remarks:

Response: The authors thank the reviewer for the concise summary and the insightful comments. To strengthen the manuscript, three references have been added to highlight the mechanisms that may lead to the incidence of microvascular disease in patients suffering from diabetes.

1. Too small group, conclusion on events rates are impossible, due to small event number, small number of patients, certainly hypothesis generating.

Response: The authors agree that it is difficult to draw strong conclusions from the results of this hypothesis-generating pilot study due to the relatively low event rate and sample size. As mentioned in the manuscript (lines 404-406), a prospective randomized clinical trial with a larger sample size is required to evaluate the clinical performance of CDP compared to FFR and confirm the outcome of this study.

2. The concept of CDP seems promising, but technically in the daily routine practice of the cathlab not easy and user-friendly.

Response: The authors agree that the diagnosis of coronary artery using CDP is presently not a standard-of-care in Cath Lab. This is because usage of dual-sensor guidewires is currently not prevalent in majority of Cath Labs. However, the use of dual-sensor guidewires in Cath Lab is expected to increase with a) technological advancement and b) mounting evidence of better clinical outcomes. This would make the measurement of functional diagnostic indices such as CDP standard-of-care with reduced complexities. Please see lines 388-392.

3. Correlation with HMR is obvious and clear, but the section on comparison with MACE should be more cautious.

Response: As per the reviewer's suggestion, the sub-section on comparison of %MACE in the discussion section has been modified with a few sentences highlighting the low incidence of MACE and relatively lower sample size. Please see lines 339-341 and lines 354-355.