

## Response by Kobayashi et al to Letter Regarding Article, “Three-Vessel Assessment of Coronary Microvascular Dysfunction in Patients with Clinical Suspicion of Ischemia: Prospective Observation Study With the Index of Microcirculatory Resistance”

### In Response:

We thank Dr. Smilowitz for his interest in our study.<sup>1</sup> In previous studies examining the invasive assessment of the coronary microvasculature, the left anterior descending artery was selected for practical purposes, either because it was the culprit vessel in an acute coronary syndrome or because the anterior wall was felt to be the most important territory.<sup>2</sup> As shown in the present study, we do not advocate interrogating only the left anterior descending artery because coronary microvascular dysfunction may occur in a patchy fashion and only involve certain regions of the myocardium. Therefore, it may be useful to measure the index of microcirculatory resistance in multiple coronary territories, especially in patients with typical angina in the absence of obstructive coronary artery disease. On the contrary, if a patient has had a previous noninvasive imaging study demonstrating ischemia in a particular territory, then interrogating only the vessel supplying that region may be sufficient.<sup>3</sup> Likewise, in patients presenting with ST-segment–elevation myocardial infarction, interrogation of the culprit vessel alone is adequate, which is supported by the recent animal study by Lee et al.<sup>4</sup> We do not advocate measuring the index of microcirculatory resistance in the left anterior descending as a method for predicting coronary microvascular dysfunction in other territories, and for this reason, we did not provide sensitivity, specificity, and accuracy of this approach.

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### Disclosures

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