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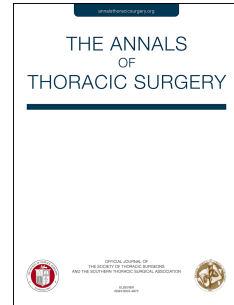
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Aspirin Resistance Significantly Influences Clinical and Economic Burden In Cardiac Surgery Patients (Reply)

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Reply To the Editor:

We thank Petricevic et al. (1) for their interest in our work (2) and their pertinent questions. Firstly, how to define aspirin resistance is contentious and to the best of our knowledge, there is still no consensus on which platelet function test is the best, let alone what cut point for each platelet function test is considered most appropriate in correlation to meaningful clinical outcomes. The cut-off – 79 AUC units – for the aspirin channel in our study was chosen based on the lower end of the normal reference range supplied by company servicing the Multiplate[®] platelet function test in Australia. It is also important to note that the normal range varies dependent on type of anticoagulant is used in the specimen collection tube (e.g. lithium heparin vs citrate vs hirudin)(<https://www.haemoview.com.au/the-instrument.html>). Obviously, the lower the threshold we use to define aspirin resistance, the higher the incidence it will be within any cohort of patients.

Secondly, we agree that serial monitoring of perioperative platelet function is ideal and can potentially much more informative. This is, however, resource-demanding and may not be cost-effective especially if this is done routinely for all cardiac surgical patients. Thirdly, we did have data on surgical drain output up to 24 hours for our patients and also until drain removal. Clinicians in our study center tend to remove surgical drains before 24 hours after cardiac surgery and as such, using this time point may induce a degree of unmeasurable inconsistency between patients. The correlation of between aspirin effect and bleeding - defined by the total

drain output before drain removal remained statistically significant, which corroborates the findings reported by your previous study.

Finally, use of objective individualized parameters to guide perioperative antiplatelet drug management and bleeding risk is important, and likely to be the holy grail of patient blood management. We very much look forward to reading studies validating this novel bleeding risk calculator.

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1. Petricevic M, Petricevic M, Biocina B. Aspirin Resistance Significantly Influences Clinical and Economic Burden In Cardiac Surgery Patients. Ann Thorac Surg 2019; in press.
2. Nicola H, Ho KM. Aspirin Resistance Incidence and Associations Between Aspirin Effect and Outcomes in Cardiac Surgery. Ann Thorac Surg 2019; in press.