training which they were at, indicating their degree of experience.[3,4] However, experience does not necessarily correlate with volume derived during the study period, as experienced surgeons do not always perform a high annual procedure volume.[5] Hence, low volume centres that are adequately staffed with EVAR experts may not experience higher mortality as seen in their study. Furthermore, volume counts from emergency repairs should be excluded, as peri-operative outcomes were only assessed for elective procedures.

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Response to 'Re. Importance of Surgeon Experience in the Relationship between Abdominal Aortic Aneurysm Surgery Volume and Peri-operative Mortality'

We thank Wee et al. for their interest in our study and their insightful comments, which we are pleased to address. They make the point that our results contrast with previous epidemiological studies. We agree, and state this in the third paragraph of the 'Discussion', and provide possible explanations for that finding, including the evolution of vascular surgery, training, and implementation of endovascular aneurysm repair (EVAR) in Australia. In the paper, we noted that none of the cited references used Australian data and we question the broader applicability of studies from the UK and US to distant geographical regions.

Wee et al. point out that it may be the experience of a unit's surgical workforce that has a greater influence on peri-operative outcomes after EVAR. While they do not define experience, it is understood that it represents the cumulative caseload volume over a surgeon's entire career, distinct from the "volume" used in our and similar studies, which refers to an annualised aortic caseload. While it is a persuasive surgical concept that total cumulative EVAR volume may be an important factor to influence peri-operative surgical outcomes, we were unable to find evidence to support that statement within the vascular scientific literature. The literature that does exist focuses on learning curves rather than total cumulative experience.[1–6] It is our view that experience is a difficult metric to quantify and may be a less useful one to investigate. While active surgical volume can be measured easily and used as a tool to guide pathways of care, the use of surgical experience for the same purpose comes with numerous challenges, beyond the scope of this reply.

Finally, Wee et al. disagree with our approach to use volume counts derived from both elective and emergency abdominal aortic aneurysm repairs; however, they give no explanation as to why. It is our view that a surgeon gains experience from performing aortic aneurysm repair in both the elective and emergency setting. We therefore used total recent experience as our metric, a methodology consistent with other studies which have investigated the topic.[7–11]

CONFLICTS OF INTEREST

R.L.V. and S.D.T. are consultants for Abbott Vascular; E.L.G.V. is a consultant for Cook, Gore, Siemens, Getinge, and Bentley; H.J.M.V. is a consultant for Medtronic, WL Gore, Endologix, and Arsenal AAA.

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