CORRESPONDENCE



## In reply: Lidocaine lubricants for intubation-related complications: more details, more significance?

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To the Editor,

We want to thank Drs Chen and Xu for their interest in our study and for raising a few important and relevant comments regarding the limitations of our meta-analysis.<sup>1</sup> As Drs Chen and Xu pointed out, some methodological flaws exist and may have influenced the outcome of our analyses. We want to take the opportunity to comment on these.

Flaws and variation in the diagnostic criteria, symptom severity scores, individual intubator expertise, and study design may all had contributed to the wide variation in the reported postoperative sore throat (POST) incidences in our primary studies. Indeed, these presented a challenge to us in the interpretation of these data. The summary of the overall biases of the primary studies was presented in Fig. 2 of our report.<sup>2</sup> Nevertheless, sensitivity analyses on some of the biases (e.g., intubator experience) did not

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reveal a change in the overall result. Other inherent limitations, such as a lack of uniformed anesthetic techniques, perioperative analgesics regimens, and the demographics of the study subjects may also have influenced the effect of lidocaine on POST in our study.

To widen our search and to maximize the total case numbers, we had elected to include studies as far back as the late 1980s, after which newer generations of endotracheal tubes were introduced for clinical use. Nevertheless, over the past 30 years, great strides had been made in anesthesia, including the development of newer intubation tools<sup>3</sup> and the use of various prophylactic medications for POST (e.g., lidocaine, magnesium),<sup>4</sup> so we cannot rule out entirely that these may have lowered the incidence of POST and in doing so, rendered the effect of lidocaine insignificant. Nevertheless, POST continues to be a relevant clinical issue and is increasingly being viewed as a preventable event.<sup>5</sup> The optimal preventative strategies for POST may lie in the combination of continual refinement of intubation tools, advancement of the

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overall expertise of anesthesiologists, and the use of effective pharmacological means.

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