

analysis of randomized controlled trials. *Resuscitation* 2019;136:54-56.

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## The authors respond

### Reply:

We thank Vargas et al very much for their comments<sup>1</sup> on our newly published research<sup>2</sup> in *RESPIRATORY CARE*. They calculated the fragility index of randomized controlled trials (RCTs) included in the systematic review and found that all RCTs had a fragility index of zero, which suggests that the RCTs evaluating the effect of noninvasive ventilation weaning on mortality were very fragile and the evidence was very weak. These comments were reasonable according to the rules of the fragility index, namely that the larger the fragility index score, the more robust the evidence, and vice versa.<sup>3</sup> We agree completely with the view that the fragility index is an important aid to a reader's interpretation of the results of RCTs and serves to make a correct judgement,<sup>3</sup> especially when the *P* value is above or below the threshold value (eg,  $P = .051$  or  $P = .049$ ).<sup>4</sup>

However, it is important to note that the benefit of the fragility index might be limited when fragility index scores are used to estimate the secondary outcomes of RCTs, given that the primary outcomes are the core detected effects in RCTs.<sup>3</sup> All of the

included studies in our meta-analysis<sup>5-9</sup> reported mortality as the secondary outcome, which might diminish the value of the fragility index to a certain extent, although it was a good recommendation to report the fragility index score of zero as an additional limitation. It is well known that only a few RCTs with small sample sizes have been performed to explore the effect of noninvasive ventilation weaning in subjects with acute hypoxemic respiratory failure,<sup>2</sup> which weakens the evidence from the pooled results. This might inspire more large RCTs to be performed, especially ones focused on mortality.

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