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### LETTER TO THE EDITOR

Reply to "Enhancing methodological rigor in mechanical insufflation-exsufflation weaning studies: Commentary on patient selection, long-term outcomes, and psychological assessment"

Respuesta a "Mejorando el rigor metodológico en los estudios de destete con insuflación-exuflación mecánica: comentario sobre la selección de pacientes, resultados a largo plazo y evaluación psicológica"

Dear Editors,

We appreciate the opportunity to respond to the comments raised by Wang and colleagues regarding our recent publication on the impact of mechanical insufflation-exsufflation (MI-E) on the weaning success rate of tracheostomized patients on prolonged mechanical ventilation.<sup>1</sup>

The first point raised concerned the need for a more detailed description of the conventional chest physiotherapyprovided to patients in the control group. As described in the Methods section, both groups received respiratory physiotherapy, including patient positioning, expiratory rib cage compressions, and manual hyperinflation prior to airway suctioning. These interventions were delivered throughout the day, as clinically indicated. 1 We acknowledge that these techniques involve a degree of subjectivity, as their effectiveness depends on the skill and engagement of the healthcare professionals delivering them. However, this limitation is inherent to conventional chest physiotherapy techniques, which are difficult to standardize in routine clinical practice. This limitation highlights the potential advantages of MI-E-not only because it allows for standardized and reproducible settings, but also because it may offer a more effective and consistent alternative for airway clearance in this patient population.<sup>2</sup>

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The second point raised concerned the outcomes analyzed. Outcome selection in intensive care studies is challenging and must be guided by the specific research question.<sup>3</sup> In this particular study—a pilot trial—the primary outcome was the feasibility of incorporating MI-E into the weaning protocol. We did include secondary outcomes such as weaning success rate, duration of weaning, intensive care unit and hospital mortality, and 60-day mortality. However, given the study's primary objective and the limited sample size, these secondary outcomes were considered exploratory.

Finally, Wang and colleagues noted that the psychological status of patients was not assessed at baseline or during the weaning process. The influence of psychological factors—such as anxiety and depression—on weaning outcomes, especially in patients undergoing prolonged mechanical ventilation, is well recognized.<sup>4</sup> Nevertheless, because patients were randomized into both groups, any underlying psychological disturbances were likely balanced between them. Furthermore, as no patient discontinued MI-E during the study period, the absence of formal psychological assessment does not appear to have compromised the interpretation of the results within the scope of our study objectives.

We hope these clarifications address the concerns raised and contribute to the ongoing discussion on the role of MI-E in the management of patients requiring prolonged mechanical ventilation.

### CRediT authorship contribution statement

All the authors have contributed to the writing of this letter, reviewed the final draft of the manuscript, and approved the final submitted version.

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# Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work, the authors did not use any Generative AI or AI-assisted technologies.

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### **Declarations of interest**

The authors declare that they have no conflicts of interest.

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