In conclusion, the authors produced an impressive and interesting study. However, after rechecking their statistics, it is clear that too many conclusions were drawn from the limited results.

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In Reply:

We thank Bloomstone for his interest in our article[1] and for his comments. We entirely agree with him when he states that the weaning process is complex, multifactorial, and highly variable; this is also outlined in the editorial that accompanied our article. Our original hypothesis was that oxygen consumption ($\dot{V}O_2$) would increase more in patients unable to sustain the weaning effort; this hypothesis was probably simplistic and did not account for some literature data, such as those published by Zakynthinos *et al.*[2] On the other hand, we relied on solid evidence in the literature[3–6] showing how increased $\dot{V}O_2$ during weaning would be associated with failure. Moreover, Bloomstone wisely underlines how $\dot{V}O_2$ is linked to the complex interplay between peripheral extraction and delivery. Unfortunately, as we acknowledge in the discussion of our article, the lack of assessment of the hemodynamic changes in our patients stands as a relevant limitation of our work.

We appreciate Chen's deep attention in revising our data. In his sharp comment, he notes a paradox between the results of the Student *t* test and those of the ANOVA. However, the two tests are difficult to compare because they are performed on different sets of data. In fact, Chen neglects the fact that, although the minimum $\dot{V}O_2$ readings were compared as absolute values using the Student *t* test, the ANOVA is performed after normalization of $\dot{V}O_2$ by the minimum $\dot{V}O_2$ reading of each patient. This normalization is expected to decrease the between-patient heterogeneity in the "absolute values" of $\dot{V}O_2$, causing the observed increase in statistical significance. Moreover, at variance from figure 2 of the original article,[1] using ANOVA, the levels of pressure support are expressed as difference from the "resting" level of pressure support, rather than as absolute values; in other words, all patients are "aligned" on the x-axis, with the minimum recorded $\dot{V}O_2$ corresponding to the same level of pressure support. We agree with Chen regarding the appropriateness of Bland–Altman analysis to evaluate the reproducibility of $\dot{V}O_2$ measurement. Because this was not included in our original article, we report it herein: the mean difference between the minimum $\dot{V}O_2$ value during the decremental pressure support trial and the $\dot{V}O_2$ during the resting phase was 14 ml/min (95% CI, 61 to −33 ml/min).

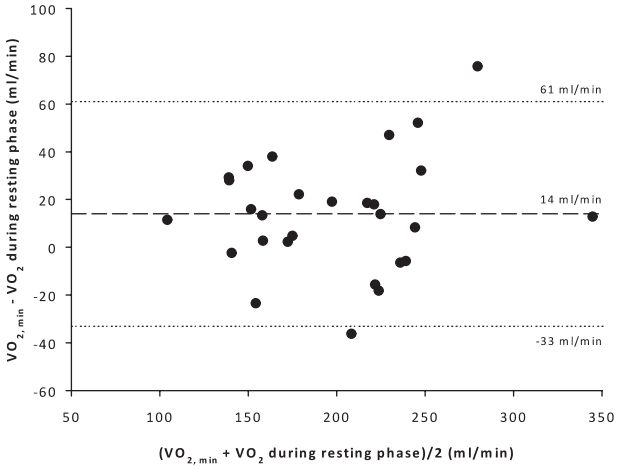

Fig. 1. Bland-Altman analysis showing the comparisons between two measurements of oxygen consumption (VO_2) obtained respectively as the minimum value during the decremental pressure support trial and during the resting phase ($VO_{2,min}$). For further details please see the original manuscript.[1]

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