

ADDITIONAL FILE 4

Title: Static compliance and driving pressure are associated with ICU mortality in intubated COVID-19 ARDS.

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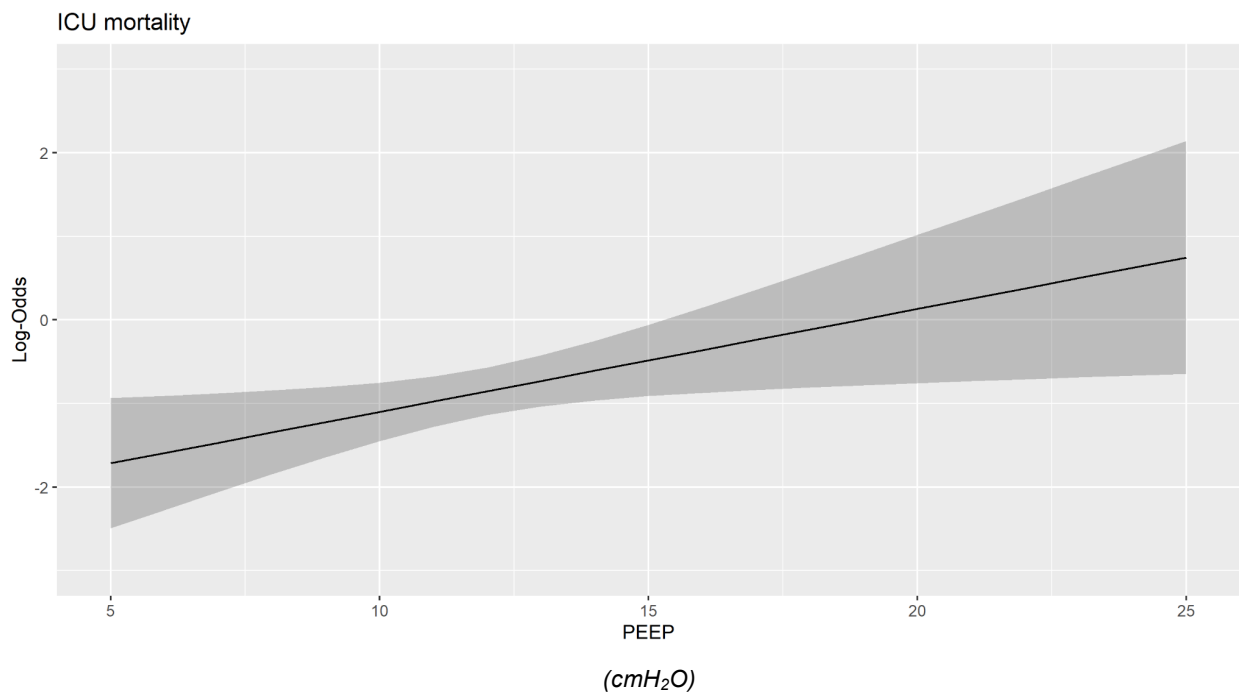
°Listed in the Acknowledgment section.

ADDITIONAL FILE 4.

A) Association between total positive end-expiratory pressure (PEEP) and intensive care unit (ICU) mortality.

Solid lines indicate the log-odds of ICU mortality, while grey areas 95% confidence interval. The p-value for non-linearity was 0.22, therefore non-linearity was not implemented in the model.

The odds ratio is presented for clinically relevant ranges of values, according to literature data [1].



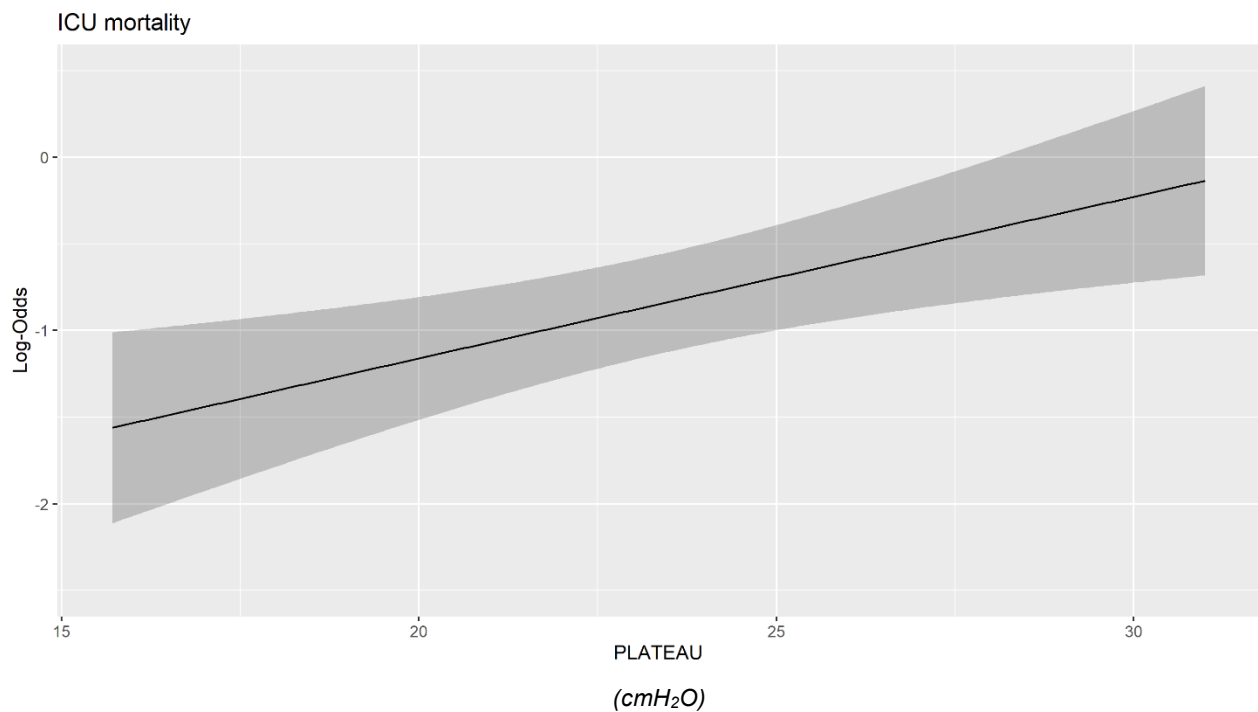
PEEP range (<i>from - to</i>)	Odds Ratio	95% Confidence Interval
6-10 cmH ₂ O	1.64	1.08 - 2.48
10-16 cmH ₂ O	1.85	1.10 - 3.12
16-25 cmH ₂ O	3.03	1.18 - 7.75

B) Association between plateau pressure and intensive care unit (ICU) mortality.

Solid lines indicate the log-odds of ICU mortality, while grey areas 95% confidence interval.

The p-value for non-linearity was 0.22, therefore non-linearity was not implemented in the model.

The odds ratio is presented for clinically relevant ranges of values, according to literature data [2].



Plateau pressure range (<i>from - to</i>)	Odds Ratio	95% Confidence Interval
20-26 cmH ₂ O	1.75	1.21 – 2.52
> 26 cmH ₂ O	4.88	1.73 – 13.80

References

1. Brower RG, Lanken PN, MacIntyre N, Matthay MA, Morris A, Ancukiewicz M, et al. Higher versus lower positive end-expiratory pressures in patients with the acute respiratory distress syndrome. *N Engl J Med.* 2004; 351(4):327-36
2. Terragni PP, Filippini C, Slutsky AS, Birocco A, Tenaglia T, Grasso S, et al. Accuracy of plateau pressure and stress index to identify injurious ventilation in patients with acute respiratory distress syndrome. *Anesthesiology.* 2013 Oct;119(4):880-9