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

Authors: Annalisa Boscolo[1*] MD, Nicolò Sella[2*] MD, Giulia Lorenzoni[3] PhD, Tommaso Pettenuzzo[1] MD, Laura Pasin[1] MD, Chiara Pretto[2] MD, Martina Tocco[2] MD, Enrico Tamburini[2] MD, Alessandro De Cassai[1] MD, Paolo Rosi[4] MD, Enrico Polati[5] MD, Katia Donadello[5] MD, Leonardo Gottin[5] MD, Silvia De Rosa[6] MD, Fabio Baratto[7] MD, Fabio Toffoletto[8] MD, V. Marco Ranieri[9] MD, Dario Gregori[3] PhD, Paolo Navalesi[1,2] MD, FERS, for the COVID-19 VENETO ICU Network[°].

*These authors equally contributed to this work.

°Listed in the Acknowledgment section.

ADDITIONAL FILE 1. STROBE Statement-Checklist.

	Item #	Recommendation	Page #
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	1
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	1-2

Introduction

	Item #	Recommendation	Page #
Background	2	Explain the scientific background and rationale for the investigation being reported	3
Objectives	3	State specific objectives, including any prespecified hypotheses	3

Methods

	Item #	Recommendation	Page #
Study design	4	Present key elements of study design early in the paper	3
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	4

Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	4
		(*b*) For matched studies, give matching criteria and number of exposed and unexposed	4
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	3,4
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	4
Bias	9	Describe any efforts to address potential sources of bias	4,5
Study size	10	Explain how the study size was arrived at	4
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	5
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	5,6

		(*b*) Describe any methods used to examine subgroups and interactions	5,6
		(*c*) Explain how missing data were addressed	5
		(*d*) If applicable, explain how loss to follow-up was addressed	NA
		(*e*) Describe any sensitivity analyses	5,6
Results			
Participants	13	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	6, Fig1
		(b) Give reasons for non-participation at each stage	6, Fig1
		(c) Consider use of a flow diagram	Fig1
Descriptive data	14	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	6, Table1
		(b) Indicate number of participants with missing data for each variable of interest	NA

		(c) Summarise follow-up time (eg, average and total amount)	Table1
Outcome data	15	Report numbers of outcome events or summary measures over time	6, Table1
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included (b) Report category boundaries when continuous variables were categorized (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	6,7
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	6,7

Discussion

Key results	18	Summarise key results with reference to study objectives	7

Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	9,10
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	7-9
Generalisability	21	Discuss the generalisability (external validity) of the study results	10
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	Declarations

Reference.

von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vandenbroucke JP; STROBE Initiative. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. Epidemiology 2007; 18(6):800-4