

Spontaneous breathing during ECMO in acute respiratory failure

Stefania Crotti¹, Nicola Bottino¹, Giulia Maria Ruggeri², Elena Spinelli², Daniela Tubiolo¹,
Alfredo Lissoni¹, Alessandro Protti¹, Luciano Gattinoni³.

Institutional affiliations

From: ¹ Dipartimento di Anestesia, Rianimazione ed Emergenza Urgenza, Fondazione IRCCS Ca' Granda, Ospedale Maggiore Policlinico, Milan, Italy. ² Dipartimento di Fisiopatologia Medico-Chirurgica e dei Trapianti, Fondazione IRCCS Ca' Granda, Ospedale Maggiore Policlinico, Università degli Studi di Milano, Milan, Italy. ³ Dpt Anesthesia and Intensive Care, Georg-August-Universität, Göttingen, Germany.

Online supplementary material – Table 1S

Table 1S. Respiratory settings during the study test.

	BRIDGE n=9	COPD n=6	ARDS n=8
Oxygen supplementation (n)	4	4*	0
Oxygen supplementation FiO ₂ (%)	88 ± 25	56 ± 30	-
CPAP (n)	5	2	8§
CPAP FiO ₂ (%)	90 ± 10	60 ± 28	71±17
CPAP PEEP (cmH ₂ O)	9 ± 2	10 ± 0	16 ± 2

During the study test patients maintained spontaneous breathing with either oxygen supplementation alone or CPAP. Of note, all the ARDS patients received CPAP and PEEP level was higher compared to the other two groups.

*oxygen supplementation was delivered through facemask in all patients except one in the COPD group, who received oxygen through a t-piece connected to the tracheostomy
 §CPAP was applied through an helmet in all patients, except two in the ARDS group, who received CPAP through nasotracheal tube and tracheostomy.