

Additional file 3.

Changes in lung aeration, regional lung ventilation and cardiac function before (H0) and after extubation (H2, H6), according to the extubation outcome

	H0	H2	H6
Lung ultrasound			
Lung ultrasound score			
Extubation success	10 (6 – 15)	10 (6 – 14)	-
Extubation failure	19 (14 – 22)	19 (15 – 23)	-
<i>Success vs. failure</i>	<i>p</i> = 0.003	<i>p</i> = 0.006	
Posterior lung ultrasound score			
Extubation success	5 (2 – 7)	5 (2 – 6)	-
Extubation failure	8 (7 – 10)	9 (6 – 11)	-
<i>Success vs. failure</i>	<i>p</i> < 0.001	<i>p</i> = 0.007	
Electrical impedance tomography			
Global inhomogeneity index			
Extubation success	0.37 (0.36 – 0.40)	0.38 (0.37 – 0.41)	0.39 (0.37 – 0.42)
Extubation failure	0.38 (0.37 – 0.40)	0.41 (0.40 – 0.44)	0.42 (0.38 – 0.44)
<i>Success vs. failure</i>	<i>p</i> = 0.718	<i>p</i> = 0.026	<i>p</i> = 0.424
Center of ventilation (front-back), %			
Extubation success	50 (46 – 52)	49 (47 – 52)	48 (46 – 52)
Extubation failure	50 (47 – 52)	50 (48 – 52)	50 (48 – 53)
<i>Success vs. failure</i>	<i>p</i> = 0.766	<i>p</i> = 0.568	<i>p</i> = 0.437

Electrical impedance tomography			
Regional ventilation delay, %			
Extubation success	7.7 (5.7 – 10.5)	6.7 (5.2 – 8.8)	8.8 (6.7 – 11.6)
Extubation failure	9.1 (7.6 – 9.7)	10.3 (7.2 – 12.5)	10.4 (7.6 – 11.4)
<i>Success vs. failure</i>	<i>p = 0.167</i>	<i>p = 0.057</i>	<i>p = 0.557</i>
Surface, nb of pixels			
Extubation success	406 (382 – 451)	388 (354 – 442)	398 (338 – 426)
Extubation failure	352 (324 – 399)	350 (306 – 386)	315 (263 – 360)
<i>Success vs. failure</i>	<i>p = 0.042</i>	<i>p = 0.051</i>	<i>p = 0.050</i>
Cardiac function			
Left ventricle ejection fraction, %			
Extubation success	45 (40 – 50)	50 (45 – 50)	-
Extubation failure	50 (48 – 58)	50 (45 – 52)	-
<i>Success vs. failure</i>	<i>p = 0.106</i>	<i>p = 0.702</i>	
E/A			
Extubation success	1.1 (0.9 – 1.2)	1.2 (0.9 – 1.4)	-
Extubation failure	1.2 (0.8 – 1.5)	0.8 (0.7 – 0.9)	-
<i>Success vs. failure</i>	<i>p = 0.792</i>	<i>p = 0.176</i>	
E/E'			
Extubation success	7.5 (6.6 – 9.9)	7.6 (6.9 – 8.7)	-
Extubation failure	8.6 (5.9 – 10.9)	7.9 (6.5 – 8.7)	-
<i>Success vs. failure</i>	<i>p = 0.973</i>	<i>p = 0.894</i>	

Cardiac function			
Cardiac output, L.min⁻¹			
Extubation success	7.1 (5.7 – 8.4)	7.1 (5.5 – 8.3)	-
Extubation failure	8.2 (7.0 – 8.9)	7.9 (7.0 – 9.4)	-
<i>Success vs. failure</i>	<i>p = 0.182</i>	<i>p = 0.327</i>	

E/A: early (E) over late (A) diastolic wave velocity ratio; E/e': E wave over tissue Doppler early (e') wave velocities at the lateral mitral valve annulus.