

**Supplementary Material File S5. Time-Events Schedule.**

<b>Measurement/Event</b>	<b>Day 0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>14</b>	<b>28</b>	<b>90</b>	<b>365</b>
Demographics, History and Physical	X											
Etiology of ARDS	X											
APACHE II, SAPS II	X											
HCG (females)	X											
Alcohol Use/Smoking History	X											
Study sevoflurane administration (maximum)	X	(X)	(X)	(X)	(X)	(X)	(X)	(X)				
Level of sedation	X	X	X	X	X	X	X	X				
Bispectral index value	A	A	A	A	A	A	A	A				
Sedation interruption (Y/N)	N	Y	Y	Y	Y	Y	Y	Y				
Ventilator parameters	X	X	X	X	X	X	X	X				
Hemodynamic parameters	X	X	X	X	X	X	X	X				
Arterial Blood Gases	X	X	X	A	A	A	A	A				
K <sup>+</sup> , HCO <sub>3</sub> <sup>-</sup> , glucose	A	A	A	A	A	A	A	A				
Serum liver function tests (AST, ALT, bilirubin, INR)	X	X	X	X	X	X	X	X				
KDIGO criteria for acute kidney injury	X	X	X	X	X	X	X	X	X			
Pneumothorax (Y/N)	X	X	X	X	X	X	X	X				
Use of rescue procedures (Y/N)	X	X	X	X	X	X	X	X				
Central Venous Pressure	A	A	A	A	A	A	A	A				
On-study meds: sedative, opioid, corticosteroid administration (Y/N)	X	X	X	X	X	X	X	X				
SOFA Score (modified) <sup>B</sup>	X	X	X	X	X	X	X	X	X			
CAM-ICU	X	X	X	X	X	X	X					

Plasma Collection	X	X	X		X		X		X <sup>***</sup>			
Urine Collection	X	X	X		X		X		X <sup>***</sup>			
Whole Blood Collection for DNA/RNA studies	X		X									
Bronchoalveolar lavage	X			X								
Undiluted pulmonary edema fluid <sup>£</sup>	X	X										
Collection of heat moisture exchanger filters <sup>£</sup>		X										
Collection of AnaConDa-S filters <sup>*,£</sup>		X										
Number of ventilator-free days								X	X	X		
Disability (KATZ ADL)											X	X
Health-Related Quality of Life (SF-36)											X	X
Self-rated health											X	X
Pain-interference											X	X
Post-Traumatic Stress-like Symptoms (PTSS-14, HADS)											X	X
Cognitive Function (AD-8)											X	X
Subsequent return to work, hospital and ED use, and location of residence											X	X
Vital Status								X	X	X	X	X

X = Required

A = When available

\* = in patients enrolled in the intervention arm

\*\*\* = or at ICU discharge, whichever occurs first

<sup>B</sup> = Records clinically available creatinine, platelets, bilirubin, SBP and vasopressor use

<sup>#</sup> = Measure during reference period (06:00-10:00); other values may be obtained closest to 08:00 on the specified calendar date

<sup>£</sup> = in selected centers only, due to logistical considerations (n=30 patients from each group)

<sup>\$</sup> = in 5 selected centers only, due to logistical considerations (total n=25 patients)