

**Table S1: Risk Factors of Bleeding**

Patient Characteristics		no	yes	p-Value
Age	>56	6 (3-11) n=20	4 (2-ND) n=15	0.672
Gender	m	4 (2-9) n=12	6 (3-12) n=23	0.053
Body Weight	>83 kg	3 (2-9) n=20	8 (6-12) n=15	<b>0.002*</b>
Height	>175 cm	6 (2-11) n=21	6 (3-12) n=14	0.594
Body Mass Index	>26.8 kg/m <sup>2</sup>	4 (2-11) n=17	6 (3-12) n=18	0.181
<i>Cause of ECMO Support</i>				<b>p-Value</b>
Aspiration pneumonia		6 (3-11) n=30	4 (1-ND) n=5	0.558
H1N1- pneumonia		4 (2-12) n=31	8 (6-11) n=4	0.346
Viral pneumonia (non H1N1)		6 (3-11) n=33	2 (2-3) n=2	0.075
Fungal pneumonia		6 (3-11) n=31	2 (2-2) n=4	<b>&lt;0.001*</b>
Pneumonia – other cause		6 (3-9) n=19	4 (2-12) n=16	0.714
Thoracic trauma		6 (3-11) n=35	0 (0-0) n=0	0.246
Interstitial lung disease		6 (3-11) n=32	3 (2-3) n=3	<b>0.044*</b>
Peritonitis/ Abdominal infection		6 (3-11) n=32	6 (1-8) n=3	0.667
Urinary tract infection		6 (3-11) n=35	0 (0-0) n=0	0.598
Cardiogenic shock		6 (3-11) n=31	8 (3-8) n=4	0.855
Other cause		4 (3-11) n=31	9 (6-9) n=4	0.364
<i>Underlying Disease</i>				<b>p-Value</b>
COPD/ Bronchial asthma		4 (2-11) n=31	9 (8-ND) n=4	0.060
Diabetes mellitus		6 (3-9) n=31	12 (2-12) n=4	0.184
Immunosuppression		6 (3-11) n=35	0 (0-0) n=0	0.262
Malignant tumor		6 (3-11) n=30	4 (2-ND) n=5	0.589
Chronic renal failure		6 (3-11) n=31	4 (2-12) n=4	0.937
Obesity		4 (2-11) n=27	8 (6-12) n=8	0.073
Liver cirrhosis		6 (3-11) n=35	0 (0-0) n=0	0.280
Cardiac disorder		6 (3-11) n=28	3 (2-12) n=7	0.506
<i>Scores and Outcome</i>				<b>p- Value</b>
SPAPS II	>60	6 (3-8) n=20	6 (3-12) n=15	0.258
APACHE II	>28	6 (3-12) n=17	4 (2-9) n=18	0.136
Outcome	Death	6 (2-ND) n=20	8 (3-11) n=15	0.536
Renal replacement therapy		6 (3-11) n=22	3 (2-8) n=13	0.083
<i>Respiratory Support prior to ECMO</i>				<b>p-Value</b>
Mechanical ventilation	>1 day	6 (3-11) n=19	4 (3-9) n=16	0.797
PaO <sub>2</sub>	>59 mmHg	6 (3-11) n=17	6 (3-12) n=15	0.653
PaCO <sub>2</sub>	>63.9 mmHg	6 (3-11) n=12	4 (3-12) n=19	0.633
Horowitz-Index	>35.2	6 (3-12) n=13	6 (3-11) n=18	0.405
PaO <sub>2</sub> /FiO <sub>2</sub>	>60.6 mmHg	4 (3-11) n=17	6 (4-12) n=15	0.541
pH (arterial)	>7.215	6 (3-9) n=17	6 (3-11) n=14	0.443
SaO <sub>2</sub>	>88.8 %	4 (3-11) n=17	6 (4-12) n=14	0.271
Serum-Lactate	>2.35 mmol/l	6 (3-9) n=14	4 (3-ND) n=12	0.649
PEEP	>15 cmH <sub>2</sub> O	6 (3-11) n=22	4 (2-12) n=11	0.799
Respiratory Rate	>23 /min	6 (3-12) n=16	6 (3-9) n=14	0.487
Minute Ventilation	>10 l/min	6 (3-9) n=16	6 (3-12) n=13	0.596
P <sub>mean</sub> - measured	>22 cmH <sub>2</sub> O	4 (3-9) n=14	6 (3-12) n=11	0.316
P <sub>mean</sub> - calculated	>22.75 cmH <sub>2</sub> O	6 (3-9) n=17	6 (3-12) n=14	0.570

PIP	>32 cmH <sub>2</sub> O	4 (3-9) n=20	8 (4-12) n=13	<b>0.047*</b>
Pulmonary ARDS		9 (6-9) n=4	4 (2-11) n=31	0.144
Non-pulmonary ARDS		6 (3-11) n=32	6 (6-8) n=3	0.807
<b>ECMO</b>				<b>p-Value</b>
Mode	va/ vva	6 (3-11) n=31	8 (3-8) n=4	0.855

Thirty-five of fifty-nine patients suffered from at least one bleeding event requiring therapeutic intervention. The table depicts the median days of ECMO therapy and their interquartile range until the occurrence of a bleeding event. *N*= number of patients with suffering from a bleeding event that required therapeutic intervention. \*: Statistically significant ( $p<0.05$ ) according to Log-Rank Kaplan-Meier Survival Analysis. ND Interquartile range not determined due to low patient number.

*APACHE II* Acute Physiology And Chronic Health Evaluation II, *COPD* Chronic obstructive pulmonary disease, *m* Male gender, *SAPS II* Simplified Acute Physiology Score II, *ARDS* Acute Respiratory Distress Syndrome, *PaCO<sub>2</sub>* Arterial partial pressure of carbon dioxide, *PaO<sub>2</sub>* Arterial partial pressure of oxygen, *PaO<sub>2</sub>/FiO<sub>2</sub>* Horowitz-Index, *PEEP* Positive endexpiratory pressure, *PIP* peak inspiratory pressure, *P<sub>mean</sub>* mean airway pressure, *SaO<sub>2</sub>* arterial oxygen saturation,