

SAPS2, APACHE2, SOFA, and Core-10-TISS upon admission as risk indicators for ICU-acquired infections: a retrospective cohort study

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## Additional File 5: Results of the cause-specific Cox models for the scores SAPS2, APACHE, SOFA and Core-10-TISS

**Supplementary Table 8: Results of the cause-specific Cox models for the scores SAPS2, APACHE, SOFA and Core-10-TISS**

		Death [HR (95% CI)]	Discharge [HR (95% CI)]	ICU- acquired infection [HR (95% CI)]	ICU-acquired infection: Type		
					PBSI [HR (95% CI)]	LRTI [HR (95% CI)]	UTI [HR (95% CI)]
<b>SAPS2</b>	<b>Per score point</b>	<b>1.02 (1.01 - 1.02), 0.00</b>	<b>0.98 (0.98 - 0.98), 0.00</b>	<b>1.00 (1.00 - 1.01), 0.34</b>	<b>1.00 (0.99 - 1.01), 0.89</b>	<b>1.01 (1.00 - 1.02), 0.14</b>	<b>1.00 (0.98 - 1.01), 0.54</b>
<b>Grouped, Reference Group: 0-30</b>	31-40	1.27 (0.94 - 1.72), 0.12	0.81 (0.75 - 0.88), 0	1.18 (0.81 - 1.7), 0.39	2.32 (1.04 - 5.2), 0.04	0.92 (0.55 - 1.52), 0.74	1.12 (0.56 - 2.25), 0.74
	41-50	1.89 (1.42 - 2.51), 0	0.69 (0.63 - 0.75), 0	0.74 (0.47 - 1.14), 0.17	1.29 (0.49 - 3.35), 0.6	0.76 (0.44 - 1.34), 0.35	0.67 (0.28 - 1.56), 0.35
	>50	2.44 (1.91 - 3.13), 0	0.47 (0.44 - 0.51), 0	1.26 (0.91 - 1.74), 0.17	1.22 (0.55 - 2.7), 0.62	1.29 (0.85 - 1.96), 0.24	1.04 (0.56 - 1.91), 0.91
<b>APACHE2</b>	<b>Per score point</b>	<b>1.03 (1.02 - 1.04), 0.00</b>	<b>0.97 (0.97 - 0.98), 0.00</b>	<b>1.01 (0.99 - 1.02), 0.45</b>	<b>0.99 (0.96 - 1.02), 0.42</b>	<b>1.01 (0.99 - 1.03), 0.29</b>	<b>1.01 (0.98 - 1.03), 0.60</b>
<b>Grouped, Reference Group 0-10</b>	11-20	1.25 (0.93 - 1.67), 0.13	0.85 (0.79 - 0.92), 0	0.99 (0.68 - 1.45), 0.97	1.64 (0.66 - 4.05), 0.28	0.78 (0.49 - 1.26), 0.31	1.55 (0.67 - 3.59), 0.30
	21-25	1.63 (1.18 - 2.23), 0	0.68 (0.61 - 0.75), 0	1.25 (0.82 - 1.9), 0.3	1.96 (0.74 - 5.16), 0.18	0.91 (0.53 - 1.56), 0.72	2.02 (0.83 - 4.93), 0.12
	>26	2.17 (1.64 - 2.88), 0	0.49 (0.44 - 0.54), 0	1.04 (0.71 - 1.54), 0.84	0.93 (0.35 - 2.49), 0.88	1.04 (0.64 - 1.67), 0.89	1.36 (0.58 - 3.23), 0.48
<b>SOFA</b>	<b>Per score point</b>	<b>1.06 (1.04 - 1.08), 0.00</b>	<b>0.91 (0.91 - 0.92), 0.00</b>	<b>1.00 (0.98 - 1.03), 0.74</b>	<b>0.99 (0.93 - 1.05), 0.78</b>	<b>1.03 (0.99 - 1.07), 0.18</b>	<b>0.99 (0.93 - 1.05), 0.78</b>
<b>Grouped, Reference Group 0-3</b>	4-5	1.6 (1.21 - 2.13), 0	0.8 (0.73 - 0.87), 0	0.87 (0.58 - 1.31), 0.51	1.08 (0.45 - 2.61), 0.86	0.91 (0.53 - 1.57), 0.74	1.08 (0.45 - 2.61), 0.86
	6-10	1.63 (1.28 - 2.09), 0	0.59 (0.54 - 0.63), 0	1.04 (0.75 - 1.44), 0.82	1.06 (0.51 - 2.22), 0.87	1.13 (0.73 - 1.75), 0.57	1.06 (0.51 - 2.22), 0.87

	>10	2.14 (1.65 - 2.79), 0	0.36 (0.32 - 0.4), 0	1.02 (0.71 - 1.48), 0.91	0.89 (0.39 - 2.03), 0.79	1.29 (0.79 - 2.09), 0.31	0.89 (0.39 - 2.03), 0.79
<b>Core-10-TISS</b>	<b>Per score point</b>	<b>1.03 (1.02 - 1.04), 0.00</b>	<b>0.96 (0.96 - 0.97), 0.00</b>	<b>1.00 (0.99 - 1.02), 0.59</b>	<b>1.01 (0.98 - 1.04), 0.41</b>	<b>1.00 (0.99 - 1.02), 0.67</b>	<b>0.97 (0.92-1.02), 0.23</b>
<b>Grouped, Reference Group 0-20</b>	21-30	1.17 (0.88 - 1.56), 0.28	0.83 (0.76 - 0.9), 0	1.68 (1.07 - 2.64), 0.02	1.59 (0.53 - 4.79), 0.41	1.51 (0.86 - 2.63), 0.15	0.85 (0.38-1.87), 0.68
	31-35	1.16 (0.86 - 1.58), 0.33	0.56 (0.51 - 0.61), 0	1.51 (0.94 - 2.42), 0.09	2.29 (0.77 - 6.86), 0.14	1.25 (0.69 - 2.27), 0.46	1.02 (0.55-1.88), 0.96
	>35	1.91 (1.44 - 2.52), 0	0.41 (0.37 - 0.45), 0	1.33 (0.83 - 2.12), 0.24	1.74 (0.58 - 5.19), 0.32	1.08 (0.6 - 1.96), 0.79	0.76 (0.37-1.56), 0.46

Legend: HR, hazard ratio; CI, confidence interval; SAPS2, Simplified Acute Physiology Score II; Core-10-TISS, Simplified Therapeutic Intervention Scoring System; APACHE2, Acute Physiology And Chronic Health Evaluation II; SOFA, Sequential Organ Failure Assessment

Significance level: \*\*\*<0.001, \*\*<0.01, \* <0.05

All models are adjusted by sex, admission from external hospital, and ICU type.

Each score was evaluated once as a continuous variable ("per score point", bold) and grouped.