

**S4 Table. Multivariate Analysis of Biomarker Association with 28 Day Mortality in Sepsis**

Biomarkers	Unadjusted		Adjusted <sup>a</sup>		Apache III adjusted <sup>b</sup>		IL-6 adjusted <sup>c</sup>		sTNFR-1 adjusted <sup>d</sup>	
	OR (95% CI)	p <sup>e</sup>	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI) <sup>d</sup>	p
<b>Inflammation:</b>										
IL-6	1.27 (1.14, 1.41)	1.3x10 <sup>-5</sup>	1.31 (1.17, 1.46)	2.0x10 <sup>-6</sup>	1.22 (1.08, 1.38)	1.4x10 <sup>-3</sup>				
IL-8	1.36 (1.20, 1.54)	1.0x10 <sup>-6</sup>	1.38 (1.22, 1.57)	7.0x10 <sup>-7</sup>	1.35 (1.16, 1.56)	8.1x10 <sup>-5</sup>				
G-CSF	1.09 (0.97, 1.23)	NS	1.12 (0.99, 1.27)	NS	1.04 (0.91, 1.17)	NS				
sTNFR-1	2.32 (1.85, 2.90)	3.2x10 <sup>-13</sup>	2.28 (1.77, 2.93)	2.2x10 <sup>-10</sup>	2.01 (1.53, 2.65)	5.2x10 <sup>-7</sup>				
<b>Endothelial Activation:</b>										
Ang-1	0.70 (0.61, 0.80)	1.2x10 <sup>-7</sup>	0.69 (0.59, 0.81)	2.9x10 <sup>-6</sup>	0.75 (0.64, 0.88)	4.3x10 <sup>-4</sup>	0.72 (0.61, 0.86)	1.6x10 <sup>-4</sup>	0.82 (0.70, 0.95)	9.8x10 <sup>-3</sup>
Ang-2	1.85 (1.50, 2.29)	9.3x10 <sup>-9</sup>	1.79 (1.43, 2.24)	4.1x10 <sup>-7</sup>	1.50 (1.16, 1.94)	1.9x10 <sup>-3</sup>	1.54 (1.19, 1.98)	9.6x10 <sup>-4</sup>	1.23 (0.94, 1.61)	NS
Ang-2/Ang-1	1.42 (1.27, 1.57)	9.6x10 <sup>-11</sup>	1.41 (1.26, 1.59)	7.8x10 <sup>-9</sup>	1.30 (1.14, 1.48)	8.2x10 <sup>-5</sup>	1.33 (1.17, 1.51)	1.9x10 <sup>-5</sup>	1.19 (1.05, 1.36)	8.0x10 <sup>-3</sup>
sVCAM-1	2.40 (1.80, 3.18)	1.5x10 <sup>-9</sup>	2.64 (1.79, 3.91)	1.0x10 <sup>-6</sup>	2.39 (1.58, 3.63)	4.2x10 <sup>-5</sup>	2.34 (1.54, 3.56)	6.5x10 <sup>-5</sup>	1.35 (0.86, 2.12)	NS

OR = Odds Ratio per doubling of biomarker; CI = Confidence Interval; APACHE III = Acute Physiology and Chronic Health Evaluation III; IL-6 = Interleukin-6; IL-8 = Interleukin-8; G-CSF = Granulocyte colony stimulating factor; sTNFR-1 = Soluble Tumor Necrosis Factor Receptor-1; Ang-1 = Angiopoietin-1; Ang-2 = Angiopoietin-2; sVCAM-1 = Soluble Vascular Adhesion Molecule-1.

<sup>a</sup> Logistic regression adjusted for age, gender, presence of infection, admitting service (medical vs. surgical), source of admission (outside hospital vs. emergency room), body mass index, smoking status, diabetes mellitus, chronic renal insufficiency, and cirrhosis

<sup>b</sup> Adjusted for APACHE III and covariates in <sup>a</sup>.

<sup>c</sup> Adjusted for Log<sub>2</sub>(IL-6) concentration and covariates in <sup>a</sup>.

<sup>d</sup> Adjusted for Log<sub>2</sub>(sTNFR-1) concentration and covariates in <sup>a</sup>.

<sup>e</sup> For the number of tests in this table, a Bonferroni p<0.05 is equivalent to p<1.56x10<sup>-3</sup>