

## SUPPLEMENTARY MATERIAL

**Supplementary Table 1:** Demographic data, clinical characteristics and leukocyte subpopulation

at HAS diagnosis. Differences between survivors and non survivors

	<b>n=196</b>	<b>Survivors = 107</b>	<b>Nonsurvivors = 89</b>	<b>p</b>
<b>Demographic data</b>				
Age (Years)	73.0 [68.1-71.4]	70.0 [65.9-70.5]	75.0 [69.4-74.0]	0.032
Sex (male)	134 (68.4)	67 (62.6)	67 (75.3)	NS
<b>Comorbidities</b>				
Arterial hypertension	120 (61.2)	67 (62.6)	53 (59.6)	NS
Cardiac disease	125 (63.8)	70 (65.4)	55 (61.8)	NS
Vascular disease	53 (27.0)	21 (19.6)	32 (36.0)	0.010
Cerebro-vascular disease	23 (11.7)	13 (12.1)	10 (11.2)	NS
Dyslipemia	113 (57.7)	63 (58.9)	50 (56.2)	NS
Cancer	67 (34.2)	31 (29.0)	36 (40.4)	NS
Diabetes (Type I or II)	55 (28.1)	30 (28.0)	25 (28.1)	NS
Obesity	41 (20.9)	24 (22.4)	17 (19.1)	NS
Alcohol abuse	29 (14.8)	13 (12.1)	16 (18.0)	NS
Chronic respiratory disease	36 (18.4)	23 (21.5)	13 (14.6)	NS
Chronic kidney disease	38 (19.4)	15 (14.0)	23 (25.8)	0.037
Corticoid treatment	24 (12.2)	15 (14.0)	9 (10.1)	NS
Immunosuppression	35 (17.9)	20 (18.7)	15 (16.9)	NS
Chronic hepatic disease	12 (6.1)	6 (5.6)	6 (6.7)	NS
Smoking habit	90 (45.9)	48 (44.9)	42 (47.2)	NS
<b>Source of Infection</b>				
Urinary	24 (12.2)	14 (13.1)	10 (11.2)	NS
Surgical	43 (21.9)	21 (19.6)	22 (24.7)	NS
Bacteraemia	49 (25.0)	34 (31.8)	15 (16.9)	0.016
Primary bacteraemia	26 (13.3)	19 (17.8)	7 (7.9)	0.042
Catheter-related bacteraemia	23 (11.7)	15 (14.0)	8 (9.0)	NS
Other	12 (6.1)	5 (4.7)	7 (7.9)	NS
Unknown	11 (5.6)	4 (3.7)	7 (7.9)	NS
<b>Cell counts at HAS diagnosis</b>				
Leucocytes (x 10 <sup>3</sup> /mm <sup>3</sup> ), median (IQR)	12.9 [8.4-19.3]	13.5[9.2-19.1]	12.3[7.4-19.9]	NS
Lymphocytes (x 10 <sup>3</sup> /mm <sup>3</sup> ), median (IQR)	0.8 [0.4-1.3]	0.9 [0.7-1.4]	0.7 [0.3-1.2]	0.042
Neutrophils (x 10 <sup>3</sup> /mm <sup>3</sup> ), median (IQR)	10.9 [6.5-17.0]	11.3 [7.2-17.0]	10.2[6.2 – 17.5]	NS
Basophils (x 10 <sup>3</sup> /mm <sup>3</sup> ), median (IQR)	0.03 [0.02-0.06]	0.03 [0.02 -0.06]	0.03 [0.00 – 0.05]	NS
Eosinophils (x 10 <sup>3</sup> /mm <sup>3</sup> ), median (IQR)	0.02 [0.00-0.11]	0.04 [0.00 - 0.14]	0.01 [0.00 - 0.09]	0.021
Monocytes (x 10 <sup>3</sup> /mm <sup>3</sup> ), median (IQR)	0.6 [0.3-0.9]	0.6 [0.3 – 0.9]	0.5 [0.2 – 0.8]	NS

HAS, Hospital acquired sepsis; IQR, Interquartile range

**Supplementary Fig. 1:** AUC comparing the ability of absolute lymphocyte count and absolute eosinophil count at HAS diagnosis to predict hospital survival.

The Optimal Operating Point (OOP) was identified as 775 lymphocytes/mm<sup>3</sup> and 13 eosinophils/mm<sup>3</sup>

