

**Appendix 3** Operating characteristics of CURB65, CRB65, SIRS criteria used in four different ways and SEWS for the chest radiograph defined cohort

Severity	Mortality	Sensitivity	Specificity	PPV	NPV
<b>CURB65</b>					
CURB65 = 0	0/37 (0%)	100%	0%	14%	NC
CURB65 = 1	1/48 (2%)	100%	20%	17%	100%
CURB65 = 2	8/54 (15%)	97%	45%	22%	99%
CURB65 = 3	10/51 (20%)	70%	69%	27%	93.5%
CURB65 = 4	9/24 (37.5%)	23%	91%	29%	88%
CURB65 = 5	2/4 (50%)	7%	99%	50%	87%
<b>CRB65</b>					
CRB65 = 0	0/47 (0%)	100%	0%	14%	NC
CRB65 = 1	8/75 (11%)	100%	25%	17.5%	100%
CRB65 = 2	10/62 (16%)	73%	61%	23%	93%
CRB65 = 3	10/30 (33%)	40%	88%	35%	90%
CRB65 = 4	2/4 (50%)	7%	99%	50%	87%
<b>SIRS used in four different ways</b>					
No SIRS <sup>1</sup>	10/62 (16%)	100%	0%	14%	NC
SIRS	5/110 (4.5%)	67%	28%	13%	84%
Severe sepsis/septic shock	15/46 (33%)	50%	83.5%	33%	91%
SIRS = 0 <sup>2</sup>	4/18 (22%)	100%	0%	14%	NC
SIRS = 1	6/44 (14%)	87%	7%	13%	78%
SIRS = 2	9/67 (13%)	67%	28%	13%	84%
SIRS = 3	10/60 (17%)	37%	58.5%	12%	85%
SIRS = 4	1/29 (3%)	3%	85%	3%	85%
SIRS = 0 <sup>3</sup>	4/18 (22%)	100%	0%	14%	NC
SIRS = 1	6/44 (14%)	87%	7%	13%	78%
SIRS = 2	2/47 (4%)	67%	28%	13%	84%
SIRS = 3	3/41 (7%)	60%	52%	16.5%	89%
SIRS = 4	0/22 (0%)	50%	72%	22%	90%
Severe sepsis/septic shock	15/46 (33%)	50%	83.5%	33%	91%
No SIRS or hypotension/ organ hypo-perfusion <sup>4</sup>	4/43 (9%)	100%	0%	14%	NC
SIRS	5/110 (4.5%)	87%	21%	15%	91%
Hypotension and/or organ hypo-perfusion, but no SIRS	6/19 (32%)	70%	77%	32%	94%
Severe sepsis/septic shock	15/46 (33%)	50%	83.5%	33%	91%
<b>SEWS</b>					
SEWS = 0	2/23 (9%)	100%	0%	14%	NC
SEWS = 1	3/29 (10%)	93%	11%	14%	91%
SEWS = 2	6/39 (15%)	83%	25%	15%	90%
SEWS = 3	3/39 (8%)	63%	42.5%	15%	62%
SEWS = 4	3/33 (9%)	53%	62%	18%	89%
SEWS = 5	4/23 (17%)	43%	78%	24%	90%
SEWS ≥ 6	9/32 (28%)	30%	88%	28%	89%

NC = Not calculable

1. Defined as in Table 1, main paper

2. Defined by presence or absence of: temperature <36°C or >38°C, pulse >90/minute, respiratory rate >20/minute and white cell count <4 or >12 cells per mm<sup>3</sup>

3. Defined by above plus definition of severe sepsis/septic shock given in Table 1, main paper

4. New definition (see results section, main paper)