

SUPPLEMENTARY INFORMATION

TITLE: Prognostic Value of Chest Computed Tomography in Community-Acquired Pneumonia Patients

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Figure S1- Area under the receiver operating characteristic curve for prediction of 30-day mortality using Pneumonia Severity Index (line) and the original CURB-65 (dash).

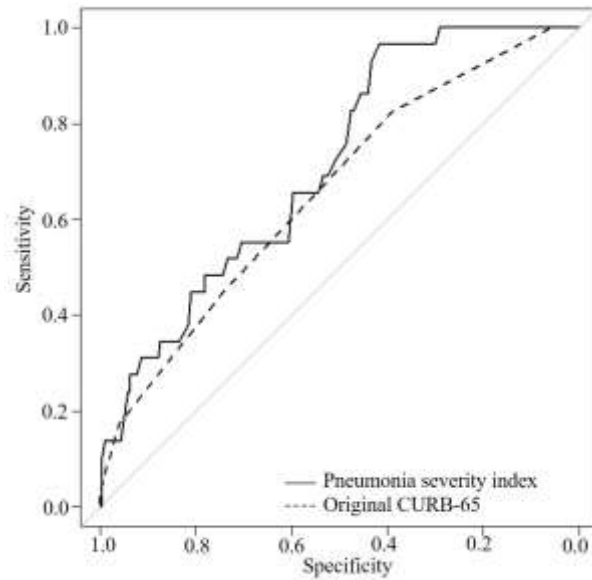


Figure S1. Area under the receiver operating characteristic curve (AUROC) for prediction of 30-day mortality using the Pneumonia Severity Index (PSI; line) and the original CURB-65 (dash) scores. There was no significant difference in the AUROC between the PSI and the original CURB-65: 0.711 and 0.658, respectively ($P = 0.222$).

Table S1. Comparison of the accuracy of assessment scores for predicting 30-day mortality

Severity Score	Patient, n	Death within 30 days, n	Sensitivity, %	Specificity, %	Positive-Predictive Value, %	Negative-Predictive Value, %
Infiltrate on CCT*						
≥ 4 lobes	42	22	75.9	90.3	89.6	77.3
Pleural effusion						
Positive	64	24	82.8	80.6	71.9	88.6
Infiltrate ≥ 4 lobes and pleural effusion on CCT						
Both positive	24	19	65.5	97.6	99.0	42.8
CURB-65						
≥ 1	223	29	100.0	5.8	13.7	100.0
≥ 2	150	24	82.8	38.8	20.5	92.2
≥ 3	66	13	44.8	74.1	29.8	84.6
≥ 4	13	5	17.2	96.1	73.4	65.0
≥ 5	1	1	3.4	100.0	100	0
CXR[†]-modified CURB-65						
≥ 1	224	29	100.0	5.3	13.3	100
≥ 2	169	24	82.8	29.6	16.3	91.2
≥ 3	102	19	65.5	59.7	26.2	87.4
≥ 4	43	11	37.9	84.5	45.7	79.8
≥ 5	7	4	13.8	98.5	92.5	46.2
≥ 6	1	1	3.4	100.0	100.0	0
CCT-modified CURB-65						
≥ 1	224	29	100.0	5.3	13.3	100.0
≥ 2	170	29	100.0	31.6	23.0	100.0
≥ 3	101	26	89.7	63.6	46.1	94.7
≥ 4	46	20	69.0	87.4	80.8	78.6
≥ 5	13	9	31.0	98.5	97.9	38.8
≥ 6	4	4	10.3	100.0	100.0	0
≥ 7	1	1	3.4	100.0	100.0	0
A-DROP						

≥ 1	203	28	96.6	15.0	15.4	96.5
≥ 2	139	24	82.8	44.2	23.6	92.5
≥ 3	60	20	69.0	80.6	64.0	83.9
≥ 4	13	5	17.2	96.1	73.4	65.0
≥ 5	1	1	3.4	100.0	100.0	0
CXR–modified A–DROP						
≥ 1	210	29	100.0	12.1	15.4	100.0
≥ 2	158	26	89.7	35.9	21.6	94.7
≥ 3	91	20	69.0	65.5	36.0	88.2
≥ 4	36	12	41.4	88.3	60.3	77.9
≥ 5	6	6	20.7	96.6	100.0	0
≥ 6	1	1	3.4	100.0	100.0	0
CCT–modified A–DROP						
≥ 1	208	28	96.6	12.6	14.7	96.0
≥ 2	156	28	96.6	37.9	25.4	98.1
≥ 3	89	26	89.7	69.4	54.7	94.2
≥ 4	44	23	79.3	89.8	89.5	79.8
≥ 5	21	15	51.7	97.1	93.5	71.4
≥ 6	4	4	13.8	100.0	100.0	0

*CCT, chest computed tomography

†CXR, chest X-ray

‡NA, not applicable

Values in parentheses are 95% CIs

Table S2. Characteristics comparison in patients with or without radiological discrepancy

Characteristics	Patients with radiological discrepancy N = 67	Patients without radiological discrepancy N = 168	P-value
Age, mean (IQR)*, years	81.0 (72.5, 87.5)	78.5 (68.0, 84.0)	0.092
Male sex, No. (%)	50 (74.6)	65 (38.7)	0.069
CAP/HCAP†, No. (%)	27 (40.3)/40 (59.7)	96 (57.5)/71 (42.5)	0.021
Performance status, No. (%)			0.001
0	10 (14.9)	66 (39.3)	
1	17 (25.4)	33 (19.6)	
2	7 (10.4)	24 (14.3)	
3	19 (28.4)	20 (11.9)	
4	14 (20.9)	25 (14.9)	
Comorbidity, No. (%)			
Diabetes	15 (22.4)	37 (22.0)	1
Chronic heart failure	18 (26.9)	20 (11.9)	0.01
Cerebrovascular diseases	19 (28.4)	35 (20.8)	0.232
Chronic kidney diseases	8 (11.9)	15 (8.9)	0.474
Dementia	14 (20.9)	20 (11.9)	0.099
Malignancy	19 (28.4)	38 (22.6)	0.4
Chronic respiratory disease	14 (20.9)	53 (31.5)	0.112
Autoimmune disease	5 (7.5)	13 (7.7)	1
Infiltrate on chest computed	22 (32.8)	20 (11.9)	< 0.001

tomography ≥ 4 lobes

*IQR, interquartile range

†CAP, community-acquired pneumonia; HCAP, healthcare-associated pneumonia