

## Additional file 5 – Outcomes according to LRTI manifestation group overall and for the four supplementary analyses

	No infiltrate and no bacteraemia patients			Infiltrate without bacteraemia patients			Bacteraemia patients		
	n (%) <sup>a</sup>	Crude RR <sup>b</sup>	Adjusted RR <sup>c</sup>	n (%) <sup>a</sup>	Crude RR <sup>b</sup>	Adjusted RR <sup>c</sup>	n (%) <sup>a</sup>	Crude RR <sup>b</sup>	Adjusted RR <sup>c</sup>
<b>30-day-mortality</b>									
<b>All patients</b>	<b>9 (5)</b>	<b>1.0 (ref.)</b>	<b>1.0 (ref.)</b>	<b>27 (11)</b>	<b>2.4 (1.1-5.0)</b>	<b>1.9 (0.9-4.1)</b>	<b>54 (21)</b>	<b>4.8 (2.4-9.6)</b>	<b>4.1 (2.0-8.5)</b>
Sub analysis 1 <sup>d</sup>	9 (5)	1.0 (ref.)	1.0 (ref.)	16 (8)	1.4 (0.6-3.2)	1.3 (0.5-3.0)	45 (20)	4.1 (2.0-8.4)	3.5 (1.6-7.3)
Sub analysis 2 <sup>e</sup>	3 (4)	1.0 (ref.)	1.0 (ref.)	15 (11)	3.1 (0.9-10.5)	2.6 (0.7-9.4)	40 (20)	5.7 (1.8-18.6)	4.5 (1.4-14.9)
Sub analysis 3 <sup>f</sup>	2 (3)	1.0 (ref.)	1.0 (ref.)	23 (12)	5.0 (1.2-21.3)	4.3 (1.0-18.8)	46 (20)	8.3 (2.0-34.1)	7.4 (1.8-31.2)
Sub analysis 4 <sup>g</sup>	3 (3)	1.0 (ref.)	1.0 (ref.)	15 (8)	3.0 (0.9-10.0)	2.4 (0.7-8.7)	31 (16)	5.9 (1.8-19.8)	6.2 (1.9-20.8)
<b>LOS (days)</b>									
<b>All patients</b>	<b>5 (2-9)</b>	<b>1.0 (ref.)</b>	<b>1.0 (ref.)</b>	<b>6 (4-16)</b>	<b>1.6 (1.3-2.0)</b>	<b>1.5 (1.2-1.9)</b>	<b>8 (4-19)</b>	<b>2.0 (1.6-2.4)</b>	<b>2.1 (1.7-2.6)</b>
Sub analysis 1 <sup>d</sup>	5 (2-9)	1.0 (ref.)	1.0 (ref.)	6 (4-15)	1.6 (1.3-2.0)	1.5 (1.2-1.9)	8 (5-19)	2.0 (1.6-2.4)	2.0 (1.6-2.6)
Sub analysis 2 <sup>e</sup>	5 (2-16)	1.0 (ref.)	1.0 (ref.)	8 (3-21)	1.8 (1.3-2.6)	1.8 (1.2-2.5)	8 (5-20)	1.9 (1.4-2.6)	2.0 (1.5-2.8)
Sub analysis 3 <sup>f</sup>	5 (3-8)	1.0 (ref.)	1.0 (ref.)	6 (4-17)	1.7 (1.2-2.2)	1.6 (1.1-2.1)	9 (5-20)	2.1 (1.6-2.8)	2.3 (1.8-3.1)
Sub analysis 4 <sup>g</sup>	4 (2-8)	1.0 (ref.)	1.0 (ref.)	6 (4-12)	1.6 (1.3-2.1)	1.5 (1.2-1.9)	8 (5-18)	2.2 (1.8-2.8)	2.4 (1.9-3.0)
<b>ICU admission</b>									
<b>All patients</b>	<b>14 (7)</b>	<b>1.0 (ref.)</b>	<b>1.0 (ref.)</b>	<b>51 (20)</b>	<b>2.8 (1.6-5.0)</b>	<b>2.4 (1.4-4.1)</b>	<b>60 (23)</b>	<b>3.2 (1.8-5.5)</b>	<b>3.1 (1.8-5.5)</b>
Sub analysis 1 <sup>d</sup>	13 (8)	1.0 (ref.)	1.0 (ref.)	37 (17)	2.3 (1.3-4.2)	2.0 (1.1-3.6)	48 (22)	2.8 (1.6-5.1)	2.7 (1.5-5.0)
Sub analysis 2 <sup>e</sup>	7 (9)	1.0 (ref.)	1.0 (ref.)	38 (28)	3.2 (1.5-6.9)	2.7 (1.3-5.6)	47 (23)	2.7 (1.3-5.7)	2.7 (1.3-5.6)
Sub analysis 3 <sup>f</sup>	6 (8)	1.0 (ref.)	1.0 (ref.)	42 (23)	2.9 (1.3-6.6)	2.3 (1.0-5.2)	58 (25)	3.2 (1.4-7.2)	3.2 (1.4-7.1)
Sub analysis 4 <sup>g</sup>	5 (5)	1.0 (ref.)	1.0 (ref.)	30 (17)	3.5 (1.4-8.9)	2.5 (1.0-6.3)	44 (22)	4.8 (1.9-11.7)	5.0 (2.1-12.1)
<b>Pulmonary complications<sup>h</sup></b>									
<b>All patients</b>	<b>2 (1)</b>	<b>1.0 (ref.)</b>	<b>1.0 (ref.)</b>	<b>12 (5)</b>	<b>4.6 (1.0-20.5)</b>	<b>4.6 (1.0-21.4)</b>	<b>36 (14)</b>	<b>13.3 (3.2-54.5)</b>	<b>12.6 (2.9-53.8)</b>
Sub analysis 1 <sup>d</sup>	1 (1)	1.0 (ref.)	1.0 (ref.)	8 (4)	6.5 (0.8-51.5)	6.6 (0.8-57.9)	31 (14)	23.9 (3.3-173.8)	22.0 (2.9-167)
Sub analysis 2 <sup>e</sup>	2 (2)	1.0 (ref.)	1.0 (ref.)	10 (7)	3.0 (0.7-13.3)	3.2 (0.7-14.7)	29 (14)	5.8 (1.4-23.6)	5.7 (1.4-24.0)
Sub analysis 3 <sup>f</sup>	1 (1)	1.0 (ref.)	1.0 (ref.)	9 (5)	3.8 (0.5-29.4)	3.7 (0.4-30.9)	34 (14)	11.3 (1.6-81.3)	10.6 (1.4-77.8)
Sub analysis 4 <sup>g</sup>	0 (0)	1.0 (ref.)	1.0 (ref.)	4 (2)	-	-	31 (16)	-	-

LRTI, lower respiratory tract infection; RR, relative risk; LOS, length of stay; ICU, intensive care unit; ref, reference; CI, confidence interval.

<sup>a</sup> Data are median (interquartile range) or n (% of all in the manifestation group).

<sup>b</sup> The crude measures are median ratios (95% CI), prevalence proportion ratios (95% CI) or MRR (95% CI).

<sup>c</sup> The multiple adjusted relative risks are computed using cox-regression for the 30-day-MRR, linear regression for LOS, and Poisson regression for ICU admission and pulmonary complications. The estimates are adjusted for age, sex, smoking, alcohol, and comorbidity.

<sup>d</sup> Restriction to patients who all had CRP >100mg/L or leukocytes >10\*10<sup>9</sup>/L and at least one new or increased pulmonary symptom.

<sup>e</sup> Restriction to patients without chronic pulmonary disease.

<sup>f</sup> Restriction to patients who have all had chest X-rays and blood cultures taken.

<sup>g</sup> Restriction to patients with an ICD-10 discharge diagnosis of acute LRTI (ICD10 codes: J13, J18.0, J18.1, J18.2, J18.8, J18.9, J20, J20.2, J20.9, J22, J44.0, J44.1).

<sup>h</sup> Pulmonary complications include pleural effusion, pleural drainage, empyema, and lung abscess.

Data available for over 99%.