

Supplementary File S5

Table S5.A Sensitivity analyses where the time under risk for the patients with pneumonia was set to 0 (i.e. as if they had the pneumonia all at the first day).

Variable	Univariable Meta-Regression			Multivariable Meta-Regression		
	Incidence Rate Ratio	95% CI	p-value	Incidence Rate Ratio	95% CI	p-value
<b>Setting</b>						
Post-Rehab (Reference)	1.00			1.00		
Acute	3.39	0.68 to 16.9	0.137	0.57	0.08 to 4.16	0.578
ICU	12.11	2.63 to 55.65	0.001	2.78	0.26 to 29.29	0.394
Long-Term Ventilation	1.38	0.08 to 22.57	0.821	0.89	0.03 to 30.19	0.948
Mixed	4.53	0.28 to 73.29	0.287	22.09	1.07 to 456.06	0.045
Rehab	3.03	0.33 to 27.51	0.325	0.76	0.06 to 9.32	0.830
<b>Level of Injury</b>						
Persons w. Paraplegia (Reference)	1.00					
Mixed, > 50% Persons w. Paraplegia	0.32	0.01 to 8.84	0.503	0.19	0.01 to 0.01	0.367
Mixed, > 50% Persons w. Tetraplegia	2.88	0.16 to 50.73	0.470	3.58	0.29 to 0.29	0.323
Persons w. Tetraplegia	2.85	0.17 to 48.72	0.469	2.22	0.17 to 0.17	0.545
Mixed, with unknown Proportion	0.48	0.02 to 11.12	0.647	2.07	0.1 to 0.1	0.633
<b>Ventilation</b>						
Not mentioned (Reference)	1.00					
Mixed	6.15	2.09 to 18.12	0.001	5.93	1.46 to 24.1	0.013
Ventilated	5.24	1.79 to 15.33	0.002	1.93	0.45 to 8.27	0.374

# Tracheostomy

No (Reference)							
Mixed	3.37	1.14 to 9.95	0.028	1.32	0.39 to 4.44	0.658	
Yes	3.84	1.11 to 13.35	0.034	0.48	0.09 to 2.68	0.405	

# Dysphagia

No	1.00		*				
Not mentioned	1.17	0.06 to 23.53	0.918				
Mixed	1.87	0.03 to 125.92	0.771				
Yes	1.42	0.04 to 52.58	0.849				

\* Too few studies with information on dysphagia (only two studies reported on dysphagia), therefore, we did not include dysphagia in the multivariable model.

Incidence Rate Ratio:  $\exp(\text{coefficient})$ : how many times the incidence per 100 days is higher compared to the reference category, (in multivariable analysis: controlled for all other variables).

Table S5.B Sensitivity analyses where the time under risk for the patients with pneumonia was set to the same time as for those patients without pneumonia (i.e. as if they had the pneumonia all at the last day).

Variable	Univariable Meta-Regression			Multivariable Meta-Regression		
	Incidence Rate Ratio	95% CI	p-value	Incidence Rate Ratio	95% CI	p-value
Setting						
Post-Rehab (Reference)	1.00			1.00		
Acute	3.21	0.93 to 11.11	0.066	0.67	0.16 to 2.86	0.591
ICU	6.41	1.98 to 20.71	0.002	1.66	0.3 to 9.23	0.563
Long-Term Ventilation	1.30	0.15 to 11.09	0.813	0.84	0.07 to 10.76	0.895
Mixed	2.47	0.29 to 20.75	0.404	13.25	1.5 to 116.97	0.020
Rehab	3.36	0.62 to 18.28	0.160	0.72	0.12 to 4.37	0.720
Level of Injury						
Persons w. Paraplegia (Reference)	1.00					
Mixed, > 50% Persons w. Paraplegia	0.25	0.02 to 3.15	0.286	0.19	0.01 to 0.01	0.225
Mixed, > 50% Persons w. Tetraplegia	2.14	0.23 to 19.79	0.503	3.27	0.45 to 0.45	0.241
Persons w. Tetraplegia	1.74	0.19 to 15.84	0.621	1.94	0.26 to 0.26	0.521
Mixed, with unknown Proportion	0.49	0.04 to 5.49	0.565	1.81	0.18 to 0.18	0.613
Ventilation						
Not mentioned (Reference)	1.00					
Mixed	3.79	1.68 to 8.55	0.001	4.36	1.56 to 12.19	0.005
Ventilated	3.95	1.77 to 8.81	0.001	2.35	0.82 to 6.73	0.112

# Tracheostomy

No (Reference)

Mixed

Yes

2.24

0.95 to 5.29

0.065

1.05

0.43 to 2.57

0.917

1.82

0.68 to 4.88

0.233

0.39

0.11 to 1.35

0.136

# Dysphagia

No

Not mentioned

Mixed

Yes

1.00

\*

0.83

0.09 to 8.05

0.874

1.98

0.08 to 51.21

0.680

0.99

0.07 to 15.09

0.995

\* Too few studies with information on dysphagia (only two studies reported on dysphagia), therefore, we did not include dysphagia in the multivariable model.

Incidence Rate Ratio:  $\exp(\text{coefficient})$ : how many times the incidence per 100 days is higher compared to the reference category, (in multivariable analysis: controlled for all other variables).