

**Supplementary Table 4.** Clinical features and epidemiologic characteristics in non-spreaders, usual-spreaders, and super-spreaders during the 2015 Korean outbreak of MERS-CoV, after censoring healthcare workers (n = 39)

Patient and epidemiologic characteristics	Non-spreader (n = 135)	Spreader (n = 12)		P value	
		Usual-spreader (n = 7)	Super-spreader (n = 5)	Non-spreader vs. spreader	Usual-spreader vs. super-spreader
<b>Patient characteristics</b>					
Age, mean (± SD)	57.9 (± 14.4)	60.0 (± 16.1)	50.6 (± 19.3)	0.680	0.344
Male	86 (63.7)	1 (14.3)	1 (20.0)	0.188	0.794
<b>Underlying diseases</b>					
DM	30 (22.2)	0 (0.0)	1 (20.0)	0.282	1.000
Hypertension	45 (33.3)	3 (42.9)	1 (20.0)	1.000	0.417
Chronic kidney diseases	8 (5.9)	1 (14.3)	0 (0.0)	0.740	1.000
Chronic heart diseases	15 (11.1)	0 (0.0)	0 (0.0)	0.999	0.566
Chronic lung diseases	16 (11.9)	2 (28.6)	0 (0.0)	0.628	0.999
Chronic liver diseases	9 (6.7)	1 (14.3)	0 (0.0)	0.826	1.000
<b>Clinical characteristics at presentation</b>					
<b>Signs and symptoms*</b>					
Fever (≥ 38.5°C)	19 (14.3)	2 (28.6)	1 (20.0)	0.330	0.736
Systolic BP ≤ 90 mmHg	8 (6.0)	2 (28.6)	0 (0.0)	0.183	0.999
Diastolic BP ≤ 60 mmHg	24 (18.0)	2 (28.6)	1 (20.0)	0.556	0.736
Respiratory rate > 24/min	18 (13.5)	4 (57.1)	0 (0.0)	0.080	0.999
Cough	76 (57.1)	6 (85.7)	4 (80.0)	0.096	0.794
Sputum	56 (42.1)	6 (85.7)	2 (40.0)	0.112	0.120
Dyspnea	30 (22.6)	5 (71.4)	3 (60.0)	0.003	0.680
Myalgia	58 (43.3)	5 (71.4)	3 (60.0)	0.130	0.680
Headache	28 (20.9)	1 (14.3)	2 (40.0)	0.740	0.327
Diarrhea	28 (20.9)	0 (0.0)	2 (40.0)	0.729	0.999
<b>Laboratory tests</b>					
WBC > 10,000/μL or < 4,000/μL <sup>†</sup>	64 (51.2)	3 (42.9)	4 (80.0)	0.638	0.216
Platelet < 100,000/μL <sup>†</sup>	28 (22.4)	3 (42.9)	2 (40.0)	0.146	0.921
CRP ≥ 3.0 mg/dL <sup>‡</sup>	60 (51.3)	6 (100.0)	4 (80.0)	0.035	1.000
BUN > 20 mg/dL <sup>§</sup>	22 (18.2)	4 (57.1)	0 (0.0)	0.217	0.999
Creatinine > 1.5 mg/dL <sup>§</sup>	8 (6.6)	1 (14.3)	0 (0.0)	0.821	1.000
CXR abnormality in more than 3 lung zones <sup>  </sup>	16 (12.4)	4 (57.1)	2 (40.0)	0.002	0.560
Symptom onset to negative conversion, day, median (IQR) <sup>¶</sup>	17.0 (14.0–20.8)	21.0 (18.0–35.0)	28.3 (32.0–43.3)	0.001	0.207
<b>Clinical outcomes</b>					
Mechanical ventilation*	31 (23.3)	6 (85.7)	2 (40.0)	0.004	0.120
Days from symptom onset to mechanical ventilation, median (IQR)*	1.0 (7.8–12.0)	6.0 (5.0–9.0)	10.5 (9.0–12.0)	0.252	0.172
Mortality	30 (22.2)	4 (57.1)	1 (20.0)	0.140	0.216
Days from symptom onset to death, median (IQR)	14.5 (11.5–21.0)	9.0 (3.8–9.0)	5.0 (5.0–5.0)	0.032	0.504
<b>Epidemiologic characteristics</b>					
Phase in chain of transmission				0.002	0.124
Primary	0 (0.0)	0 (0.0)	1 (20.0)		
Secondary	21 (15.9)	2 (33.3)	3 (60.0)		
Tertiary	100 (75.8)	4 (66.7)	1 (20.0)		
Quaternary	11 (8.3)	0 (0.0)	0 (0.0)		
Symptom onset after June 7**	29 (22.0)	2 (28.6)	0 (0.0)	0.670	0.999
Median incubation period, day, mean (± SD) <sup>††</sup>	7.3 (± 4.5)	7.5 (± 2.9)	8.0 (± 5.0)	0.741	0.819
Symptom onset to isolation, day, mean (± SD)**	3.9 (± 3.8)	4.6 (± 2.4)	6.8 (± 3.4)	0.169	0.211
Nonisolated in-hospital days, median (IQR)	1.0 (0.0–2.0)	1.0 (0.0–4.0)	7.0 (3.0–9.0)	0.002	0.061
Nonisolated in-hospital days ≥ 2 day	47 (34.8)	4 (57.1)	5 (100.0)	0.012	0.999
Symptom onset to diagnosis, day, mean (± SD)**	7.0 (± 3.9)	7.1 (± 2.5)	8.8 (± 3.4)	0.450	0.325

Data shown are number (%) not otherwise specified.

MERS-CoV = Middle East Respiratory Syndrome Coronavirus, SD = standard deviation, DM = diabetes mellitus, BP = blood pressure, WBC = white blood cell, CRP = C-reactive protein, BUN = blood urea nitrogen, CXR = chest X-ray, IQR = interquartile range.

\*Data were unavailable in 2 cases (1.4%); †Data were unavailable in 10 cases (6.8%); ‡Data were unavailable in 19 cases (12.9%); §Data were unavailable in 14 cases (9.5%);

||Data were unavailable in 6 cases (4.1%); ¶Data were unavailable in 40 cases (27.2%); \*\*Data were unavailable in 3 cases (2.0%); ††Data were unavailable in 5 cases (3.4%).