

SUPPLEMENTARY MATERIAL

Smoking patterns and outcomes of severe sars-CoV-2 infection: a retrospective cohort study

Branko Beronja,^{1*} Aleksandra Karan,^{2*} Biljana Lukic,²
Ivana Milosevic,^{1,3} Jelena Dotlic,^{1,4} Tatjana Gazibara⁵

¹Faculty of Medicine, University of Belgrade; ²General Hospital "Dr Radivoj Simonovic", Sombor; ³Clinic of Infectious and Tropical Diseases, University Clinical Center of Serbia, Belgrade; ⁴Clinic of Obstetrics and Gynecology, University Clinical Center of Serbia, Belgrade; ⁵Institute of Epidemiology, Faculty of Medicine, University of Belgrade, Serbia

*These authors contributed equally to this work and share first authorship.

Correspondence: Tatjana Gazibara, Institute of Epidemiology, Faculty of Medicine, University of Belgrade, Visegradska 26a, 11000 Belgrade, Serbia.

Tel.: +381-11-3607-062. E-mail: tatjana.gazibara@med.bg.ac.rs

Key words: COVID-19, smoking, mortality.

Supplementary Table 1. Results of the Cox proportional hazard model: univariate associations with mortality in smokers and non-smokers.

Model 1	Smokers			Non-smokers		
	Univariate estimates			Univariate estimates		
	HR	95% CI	p	HR	95% CI	p
Age	1.01	0.99-1.02	0.08	1.03	0.99-1.08	0.01
Gender	1.02	1.02-1.03	0.04	1.26	1.12-1.36	0.13
Duration of hospital stay	1.17	1.08-1.32	<0.01	1.21	1.16-1.64	<0.01
COVID-19 vaccination	0.86	0.56-1.31	0.19	1.02	1.01-1.91	0.21
Duration of smoking	1.07	1.01-1.13	0.02	n/a		
Cigarettes smoked daily	1.28	1.25-1.31	0.12			
Fever	0.15	0.31-0.59	0.47	0.35	0.10-0.19	0.09
Cough	1.83	1.38-1.29	0.42	1.79	0.52-6.16	0.35
Fatigue	1.82	1.58-1.17	0.82	1.31	1.08-1.18	0.08
Shortness of breath	1.57	1.39-1.83	<0.01	1.67	1.20-2.21	0.51
Chest pain	1.69	1.42-2.14	0.01	1.41	1.09-1.92	0.26
Hypertension	1.63	1.47-1.71	0.03	1.65	1.19-2.25	0.65
Insulin dependent diabetes	1.73	1.45-1.19	0.21	1.02	1.00-1.03	0.15
Oral antidiabetics	1.26	0.73-2.16	0.39	1.03	1.02-1.05	0.29
Obesity	1.70	0.98-2.98	<0.01	1.42	0.18-11.3	0.73
Malignant tumors	1.67	1.27-2.65	0.29	1.98	1.78-2.31	0.32
Respiratory diseases	1.47	1.26-1.84	<0.01	1.02	1.01-1.03	0.35
Chronic kidney disease	1.61	0.96-2.96	0.06	1.32	1.21-1.42	0.48
Model 2	Univariate estimates			Univariate estimates		
	HR	95% CI	p	HR	95% CI	p
Age	1.00	0.99-1.02	0.08	1.03	1.00-1.06	0.01
Gender	1.02	1.02-1.03	0.04	1.26	1.12-1.36	0.13
Red blood cells	0.85	0.64-1.12	0.22	0.98	0.45-1.75	0.80
Hemoglobin	0.99	0.98-1.00	0.19	0.87	0.34-1.35	0.74
White blood cells	1.98	1.93-2.01	0.70	1.05	0.85-1.29	0.64
Lymphocytes	0.95	0.69-1.31	0.79	0.59	0.19-1.86	0.37
Neutrophils	1.97	1.89-2.05	0.47	1.03	0.79-1.33	0.81
D-dimer	1.01	0.85-1.19	0.78	1.93	0.96-2.74	<0.01
Prothrombin time	0.98	0.92-1.01	0.59	1.03	0.44-1.61	0.93
International normalized ratio	1.01	0.99-1.02	0.41	1.83	1.00-4.12	0.83
Glycemia	1.98	0.92-1.05	0.64	1.07	0.86-1.35	0.50
Creatinine	1.99	1.99-2.01	0.44	1.99	1.98-2.11	0.56
Urea	1.90	1.79-2.02	0.10	1.24	0.76-2.02	0.37
Albumin	0.87	0.66-1.01	0.21	0.75	0.58-0.99	0.04
Procalcitonin	1.05	1.01-1.10	0.17	1.32	1.21-1.50	0.29
Lactate dehydrogenase	1.65	1.21-1.94	<0.01	1.29	1.10-1.45	0.69
C-reactive protein	1.09	1.09-1.11	0.81	1.01	0.99-1.03	0.23
Ferritin	1.00	0.99-1.01	0.99	1.25	1.10-1.30	0.87
Alanine aminotransferase	1.02	1.02-1.03	0.16	1.26	1.11-1.42	0.45
Aspartate aminotransferase	0.97	0.87-1.02	0.45	1.21	1.13-1.32	0.21
Gamma glutamyl-transferase	0.98	0.86-1.03	0.36	1.35	1.10-2.01	0.68
Creatine kinase	1.02	1.01-1.03	0.65	1.02	1.02-1.03	0.45

HR, hazard ratio; CI, confidence interval.