

## SUPPLEMENTARY MATERIAL - COVER 2 study

**Supplementary Table S1.** Covariate balance across overall ‘control’ and ‘recommended treatment’ cohorts before and after matching.

	Control cohort (n=3260)	Recommended treatment cohort (n=108)	Standardised Difference before matching* (%)	Standardised Difference after matching* (%)
<b>Demographic characteristics</b>				
Mean age ± SD (years)	51.58±14.72	53.1±15.8	10.2	2.6
Males, n (%)	1228 (37.67)	46 (42.59)	10.1	17.2
<b>Comorbidities, n (%)</b>				
Cardiovascular disease	159 (4.88)	8 (7.41)	10.6	3.4
Hypertension	591 (18.13)	23 (21.30)	8.0	4.5
Diabetes mellitus	116 (3.56)	1 (0.93)	17.9	18.6
Overweight/Obesity	481 (14.75)	11 (10.18)	13.9	30.9

Data are numbers (percentages).

\* Standardised differences between the two groups calculated using ‘stddiff’ STATA module.

**Supplementary Table S2.** Demographic and early symptoms associated with COVID-19 illness in the overall ORIGIN control group.

	<b>Overall (n=3260)</b>
<b>Demographic characteristics</b>	
Age, years	
18-40	726 (22.27)
41-65	1991 (61.07)
66-75	406 (12.45)
>75	137 (4.20)
Mean age ± SD	51.58±14.72
Males, n (%)	1228 (37.67)
<b>Comorbidities, n (%)</b>	
Cardiovascular disease	159 (4.88)
Hypertension	591 (18.13)
Diabetes mellitus	116 (3.56)
Overweight/Obesity	481 (14.75)
<b>Early symptoms, n (%)</b>	
Fever	1932 (59.26)
Myalgia	1501 (46.04)
Tiredness/exhaustion	1890 (57.98)
Dyspnoea	688 (21.10)
Chest pain	476 (14.60)
Headache	1141 (35.00)
Lack of appetite	835 (25.61)
Cough	1195 (36.66)
Sore throat	524 (16.07)
Rhinitis	405 (12.42)
Vomiting/nausea	454 (13.93)
Diarrhoea	672 (20.61)
Red eyes	397 (12.18)
Anosmia	716 (21.96)
Ageusia	1503 (46.10)

Data are numbers (percentages).

**Supplementary Table S3.** Multivariable logistic regression based on all 3368 patients (3260 included in the ‘control’ and 108 in the ‘recommended treatment’ cohort).

	Odds ratio	95% confidence interval	P value
Age ( <i>years</i> )	0.95	0.94 to 0.97	<0.0001
Male sex	0.26	0.19 to 0.35	<0.0001
Cardiovascular disease	1.60	1.01 to 2.47	0.0408
Hypertension	1.23	0.88 to 1.69	0.2200
Diabetes mellitus	1.51	0.90 to 2.48	0.1083
Overweight/Obesity	2.05	1.45 to 2.88	<0.0001
Treatment (control vs recommended)	8.90	1.92 to 158.37	0.0313

## **COVER 2 Study Organisation**

Members of the COVER 2 Study Organisation includes the following (all in Italy): *Chief Investigator* - Giuseppe Remuzzi (Bergamo); *Study coordinators* - Norberto Perico, Fredy Suter (Bergamo); *Coordinating Centre* – Istituto di Ricerche Farmacologiche Mario Negri IRCCS, Centro di Ricerche Cliniche per le Malattie Rare *Aldo e Cele Daccò*, Ranica (Bergamo); *Study investigators including patients* - Elena Consolaro (Varese), Chiara Moroni (Varese), Umberto Cantarelli (Teramo), Stefania Pedroni (Varese), Maria Vittoria Paganini (Varese), Elena Pastò (Varese), Grazia Pravettoni (Varese), Fredy Suter (Bergamo); *Data collection and processing* – Nadia Rubis, Davide Villa, Olimpia Diadei, Davide Martinetti, Matias Trillini (Bergamo); *Data Analysis* - Annalisa Perna, Tobia Peracchi (Bergamo); *Regulatory Affairs* - Paola Boccardo (Bergamo); *Finalisation of the manuscript*: Norberto Perico, Piero Ruggenenti, Giuseppe Remuzzi (Bergamo).