

# THE LANCET

## Child & Adolescent Health

### Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Götzinger F, Santiago-García B, Noguera-Julián A, et al, on behalf of the ptbnet COVID-19 Study Group. COVID-19 in children and adolescents in Europe: a multinational, multicentre cohort study. *Lancet Child Adolesc Health* 2020; published online June 25. [http://dx.doi.org/10.1016/S2352-4642\(20\)30177-2](http://dx.doi.org/10.1016/S2352-4642(20)30177-2).

## Supplementary Appendix

**Supplementary Table S1.** Baseline data on demographics, immunocompromise, clinical features, radiological findings at presentation and support required in patients in whom another viral agent was detected in addition to SARS-CoV-2 (i.e. with viral co-infection) compared to patients without additional viral agents detected. Figures are numbers and percentages; p-values are based on univariable analyses.

	No additional virus detected (n=553)	Additional virus detected (n=29)	p-value	Odds ratio (95%CI)
<b>Age</b> median (IQR), years	6 (0.5 – 13.0)	2.0 (0.4 – 5.5)	0.029	0.9 (0.8 – 0.9)
<2 years	214 (38.7)	16 (55.2)		1.9 (0.9 – 4.1)
2-5 years	56 (10.1)	6 (20.7)		2.3 (0.9 – 5.9)
5-10 years	91 (16.4)	3 (10.3)		0.5 (0.1 – 1.9)
>10 years	192 (34.7)	4 (13.8)		0.3 (0.1 – 0.8)
<b>Age</b> <1 month	39 (7.1)	1 (3.4)	0.71	0.4 (0.0 – 3.5)
<b>Gender</b> (male)	295 (53.3)	16 (55.2)	0.84	1.0 (0.5 – 2.2)
<b>Immunosuppressive therapy</b> *	26 (4.7)	3 (10.3)	0.17	2.3 (0.6 – 8.2)
<b>Known Immunodeficiency</b>	3 (0.5)	0 (0)	1.00	- **
<b>Chemotherapy in last 6 months</b>	24 (4.3)	1 (3.4)	1.00	0.7 (0.1 – 6.0)
<b>Signs and symptoms</b> ***				
Asymptomatic	91 (16.4)	1 (3.4)	0.06	0.1 (0.0 – 1.3)
Pyrexia	361 (65.3)	18 (62.1)	0.72	0.8 (0.4 – 1.8)
URTI	290 (52.4)	23 (79.3)	0.0055	3.4 (1.3 – 8.6)
LRTI	125 (22.6)	18 (62.1)	<0.0001	5.6 (2.5 – 12.1)
Gastrointestinal	121 (21.9)	7 (24.1)	0.77	1.1 (0.4 – 2.7)
Headache ****	67 (27.0)	3 (42.9)	0.39	2.0 (0.4 – 9.2)
<b>Radiological findings</b> *****				
Suggestive of pneumonia	83 (45.9)	10 (58.8)	0.30	1.6 (0.6 – 4.6)
Suggestive of ARDS	9 (5.0)	1 (5.9)	0.60	1.1 (0.1 – 10.0)
<b>Support required during admission</b>				
ICU admission	41 (7.4)	7 (24.1)	0.0015	3.9 (1.6 – 9.8)
Oxygen therapy	62 (11.2)	12 (41.4)	<0.0001	5.5 (2.5 – 12.2)
CPAP	26 (4.7)	5 (17.2)	0.0035	4.2 (1.4 – 11.9)
Mechanical ventilation	20 (3.6)	5 (17.2)	<0.0001	5.5 (1.9 – 16.0)
Inotropic support	16 (2.9)	3 (10.3)	0.063	3.8 (1.0 – 14.1)

\*At diagnosis of COVID-19.

\*\* Odds ratio not calculated as one of the required values is zero.

\*\*\* Signs and symptoms at initial presentation.

\*\*\*\* Data on presence of headache only includes children  $\geq 5$  years of age in whom those data were recorded (total, n=255; children without additional viral agent, n=248; children with additional viral agent, n=7).

\*\*\*\*\* Chest radiograph performed in n=198 only (children without additional viral agent, n=181; children with additional viral agent, n=17).

Abbreviations: ARDS: acute respiratory distress syndrome, CPAP: Continuous Positive Airway Pressure, ICU: intensive care unit, IQR: interquartile range, LRTI: lower respiratory tract infection, URTI: upper respiratory tract infection.

**Supplementary Table S2.** Baseline demographic data, pre-existing medical conditions, concomitant medication, and radiological findings at presentation comparing patients who received drugs with antiviral activity (hydroxychloroquine, remdesivir, oseltamivir) and/or immunomodulatory drugs (systemic corticosteroids, intravenous immunoglobulin, tocilizumab, anakinra, siltuximab) as treatment for COVID-19, compared to patients who received neither. Figures shown are numbers and percentages; p-values shown are based on univariate analyses. Odds ratios refer to the likelihood of receiving treatment for COVID-19.

	<b>No treatment (n=508)</b>	<b>COVID-19-related treatment (n=74)</b>	<b>p-value</b>	<b>Univariate odds ratio (IQR)</b>
<b>Age</b> median (IQR), years	5.0 (0.5 – 12.0)	6.0 (1.0 – 12.2)	0.30	1.0 (0.9 – 1.0)
<2 years	203 (40.0)	27 (36.5)	0.56	0.8 (0.5 – 1.4)
2-5 years	54 (10.6)	8 (10.8)	0.96	1.0 (0.4 – 2.2)
5-10 years	80 (15.7)	14 (18.9)	0.48	1.2 (0.6 – 2.3)
>10 years	171 (33.7)	25 (33.8)	0.98	1.0 (0.6 – 1.6)
<b>Age</b> <1 month	36 (7.1)	4 (5.4)	0.80	0.7 (0.2 – 2.1)
<b>Gender</b> (male)	239 (47.0)	32 (43.2)	0.54	1.1 (0.7 – 1.9)
<b>Pre-existing medical conditions</b>				
Any	106 (20.9)	39 (52.7)	<0.0001	4.2 (2.5 – 6.9)
Malignancy	15 (3.0)	12 (16.2)	<0.0001	6.3 (2.8 – 14.2)
Cardiac disease	16 (3.1)	9 (12.2)	<0.0001	4.2 (1.8 – 10.0)
Respiratory disease	16 (3.1)	13 (17.6)	<0.0001	6.5 (3.0 – 14.2)
Neurological disease	21 (4.1)	5 (6.8)	0.30	1.6 (0.6 – 4.6)
Renal disease	8 (1.6)	1 (1.4)	1.00	0.8 (0.1 – 6.9)
Chromosomal abnormality	8 (1.6)	2 (2.7)	0.37	1.7 (0.3 – 8.3)
Other	30 (5.9)	5 (6.8)	0.77	1.1 (0.4 – 3.0)
<b>Immunosuppressive therapy</b> *	16 (3.1)	13 (17.6)	<0.0001	6.5 (3.0 – 14.2)
<b>Known immunodeficiency</b>	2 (0.4)	1 (1.4)	0.33	3.4 (0.3 – 38.7)
<b>Chemotherapy in last 6 months</b>	14 (2.8)	11 (14.9)	<0.0001	6.1 (2.6 – 14.1)
<b>Radiological findings</b> **				
Suggestive of pneumonia	48 (35.6)	45 (71.4)	<0.0001	4.5 (2.3 – 8.6)
Suggestive of ARDS	1 (0.7)	9 (14.3)	<0.0001	22.3 (2.7 – 180.5)
<b>Dual viral infection</b>	17 (3.3)	12 (16.2)	<0.0001	5.5 (2.5 – 12.2)

\* At diagnosis of COVID-19.

\*\*Chest radiograph performed in n=198 only (children without treatment, n=135; children with treatment, n=63).

Abbreviations: ARDS: acute respiratory distress syndrome, IQR: interquartile range, LRTI: lower respiratory tract infection, URTI: upper respiratory tract infection