

Suppl. Table 3 Association of abnormal liver test results with severity of the COVID-19 infection

	ICU admission			COVID-19-related death			Composite endpoint of severe outcome <sup>1</sup>		
	OR	95 % CI	p	OR	95 % CI	p	OR	95 % CI	p
<b>Liver biochemistry abnormality<sup>2</sup></b>	2.67	1.46-4.87	<b>0.001 *</b>	1.21	0.54-2.70	0.65	2.24	1.26-3.94	<b>0.006 *</b>
<b>AST elevation</b>	2.68	1.50-4.80	<b>0.001 *</b>	0.95	0.43-2.12	0.90	2.20	1.25-3.87	<b>0.006 *</b>
<b>ALT elevation</b>	2.35	1.26-4.36	<b>0.007 *</b>	0.68	0.26-1.78	0.43	1.68	0.94-3.09	0.10
<b>ALP elevation</b>	0.95	0.38-2.36	0.91	0.95	0.26-3.48	0.94	0.74	0.30-1.84	0.52
<b>TBIL elevation</b>	0.73	0.18-2.90	0.65	4.56	1.21-17.39	<b>0.025 *</b>	1.40	0.39-5.00	0.60
<b>GGT elevation</b>	1.96	1.10-3.50	<b>0.023 *</b>	1.21	0.53-2.79	0.65	1.45	0.82-2.56	0.20
<b>Hypoalbuminemia</b>	12.71	6.00-26.92	<b>&lt; 0.001 *</b>	2.98	1.19-7.44	<b>0.019 *</b>	11.86	5.59-25.17	<b>&lt; 0.001 *</b>
<b>Hypoalbuminemia and any liver biochemistry abnormality<sup>2</sup></b>	16.71	7.20-38.82	<b>&lt; 0.001 *</b>	2.58	1.07-6.23	<b>0.035 *</b>	16.71	6.82-40.94	<b>&lt; 0.001 *</b>
<b>Hypoalbuminemia and AST elevation</b>	24.59	8.97-67.42	<b>&lt; 0.001 *</b>	2.26	0.95-5.40	0.07	32.38	9.49-110.46	<b>&lt; 0.001 *</b>
<b>Hypoalbuminemia and ALT elevation</b>	15.88	4.27-51.91	<b>&lt; 0.001 *</b>	1.16	0.40-3.42	0.79	11.40	3.28-39.63	<b>&lt; 0.001 *</b>
<b>Hypoalbuminemia and TBIL elevation</b>	1.77	0.29-10.87	0.54	9.07	1.43-57.57	<b>0.019 *</b>	3.89	0.43-35.66	0.023
<b>Hypoalbuminemia and GGT elevation</b>	35.79	8.16-157.04	<b>&lt; 0.001 *</b>	2.40	0.91-6.31	0.08	26.78	6.13-117.01	<b>&lt; 0.001 *</b>

Stated are the odds ratios (OR) for liver biochemistry parameters at admission. <sup>1</sup> The composite endpoint is comprised of ICU admission and/or mechanical ventilation and/or COVID-19-related death. <sup>2</sup> Liver biochemistry abnormalities included ALT, AST, GGT, ALP and TBIL but not albumin. Abbreviations: ALP: Alkaline phosphatase; ALT: Alanine aminotransferase; AST: Aspartate aminotransferase; CI: Confidence interval; COVID-19: Coronavirus Disease 2019; GGT: Gamma-glutamyltransferase; TBIL: Total bilirubin; ULN: Upper limit of normal. \* shows a statistical significance (p≤0.05).