

**Supplementary Table 2. Results of Subgroup Analysis of Critically Ill Patients**

Outcomes	Studies Including Only Critically Ill Patients			Other Studies			<i>P</i>
	No. of Studies	Proportion (%)	Meta-Analytic Proportion (95% CI)	No. of Studies	Proportion (%)	Meta-Analytic Proportion (95% CI)	
<b>Cohort-based outcomes</b>							
Patients with neurologic symptoms/all patients	3	107/365 (29)	35.9 (18.8–57.4)	1	308/1176 (26)	-	0.601
Patients with neuroimaging/patients with neurologic symptoms	3	84/107 (79)	92.6 (35.3–99.6)	1	73/308 (24)	-	0.217
Patients with neuroimaging/all patients	3	84/879 (10)	22.7 (3.2–72.3)	7	1102/17094 (6)	6.8 (3.8–11.7)	0.027
Patients with any neuroimaging findings/patients with neuroimaging	2	43/57 (75)	76.0 (53.2–89.8)	3	176/247 (71)	72.8 (56.8–84.5)	0.793
Patients with neuroimaging findings related to COVID-19*/patients with neuroimaging	3	40/84 (48)	48.2 (23.0–74.4)	5	174/666 (26)	29.8 (19.3–42.9)	0.151
Patients with neuroimaging findings related to COVID-19*/all patients	3	40/879 (5)	9.1 (1.4–42.0)	4	138/9646 (1)	1.6 (0.7–3.6)	0.029
<b>Neuroimaging findings</b>							
Olfactory bulb abnormality	0	-	-	2	11/49 (22)	23.1 (12.9–37.7)	-
White matter abnormality	1	10/27 (37)	-	5	69/438 (16)	14.8 (5.3–35.0)	0.390
Acute or subacute ischemic infarction	3	16/81 (20)	17.2 (4.6–47.3)	7	114/908 (13)	15.1 (9.4–23.3)	0.617
Encephalopathy	3	25/84 (30)	22.2 (2.3–77.8)	5	33/348 (9)	9.2 (3.0–24.7)	0.323
Cerebral microbleeds	1	7/27 (26)	-	7	100/956 (10)	10.7 (4.0–25.7)	0.485
Intracranial hemorrhage	2	6/57 (11)	11.3 (5.1–23.0)	3	41/709 (6)	7.0 (2.6–17.5)	0.650
Others	2	3/57 (5)	5.5 (1.8–15.6)	3	35/415 (8)	8.9 (1.5–39.2)	0.697
Venous thrombosis	2	3/57 (5)	5.5 (1.8–15.6)	0	-	-	-
PRES	0	-	-	2	5/351 (1)	1.6 (0.6–3.8)	-
Grey matter abnormality	1	10/27 (37)	-	1	1/59 (2)	-	NA
Cranial neuropathy other than olfactory nerves	0	-	-	3	6/371 (2)	2.7 (0.6–11.5)	-

\*Excluding neuroimaging findings not likely to be related to COVID-19, including cavernoma, chronic infarcts, known white matter lesions from multiple sclerosis, white matter lesions of small vessel disease, and microbleeds associated with chronic infarction. CI = confidence interval, COVID-19 = coronavirus disease 2019, NA = not available, PRES = posterior reversible encephalopathy syndrome