

Supplementary materials for “Down syndrome *per se* is associated with increased risk for in-hospital mortality and morbidity in paediatrics with SARS-CoV-2 in Brazil” by Leung et al.

Table S1. E-values for multivariate logistic regression

	E-value
Age	1.12
Asthma	2.41
Chronic hematologic disease	1.69
Chronic cardiovascular disease	2.61
Chronic liver disease	3.49
Chronic neurological disease	2.48
Chronic renal disease	2.17
Coryza	2.25
Cough	2.26
Down syndrome	2.04
Dyspnea	1.64
Immunocompromised	2.92
Ethnicity: Indigenous	3.28
Male	1.36
Location: North	2.68
Location: Northeast	3.08
SaO ₂ <95%	2.06
Obesity	2.15
Chronic pulmonary disease	1.84
Respiratory discomfort	2.06
Sorethroat	1.74
Respiratory viral infection	2.61
Vaccination against influenza	2.03

Table S2. Difference in characteristics after propensity score matching (not matching for Dead)

	Pediaetric patients with Down syndrome (n)	Pediaetric patients without Down syndrome (n)	p-value
Age, y, median [IQR]	3.77 [0.63,12.49] (191)	5.59 [0.66,12.53] (573)	0.955
Male, %	49.74 (95/191)	54.62 (313/573)	0.243
Dead, %	24.08 (46/191)	16.93 (97/573)	0.032
Time to recover, median [IQR] d	9 [5,18] (138)	7 [3,16] (445)	0.015
Region, %			
North	8.90 (17/191)	5.93 (34/573)	0.180
Northeast	18.85 (36/191)	20.59 (118/573)	0.677
Southeast	41.36 (79/191)	45.20 (259/573)	0.400
Center West	9.95 (19/191)	6.81 (39/573)	0.158
South	20.94 (40/191)	21.47 (123/573)	0.919
Ethnicity, %			
Caucasian	56.02 (107/191)	51.31 (294/573)	0.277
Asian	0.52 (1/191)	0.18 (1/573)	0.438
Hispanic	42.93 (82/191)	48.17 (276/573)	0.241
Indigenous	0.52 (1/191)	0.35 (2/573)	>0.999
Signs and symptoms, %			
Asymptomatic	0.52 (1/191)	0.00 (0/573)	0.250
Abdominal pain	5.76 (11/191)	5.76 (33/573)	>0.999
Anosmia	1.05 (2/191)	2.44 (14/573)	0.382
Ageusia	0.52 (1/191)	1.92 (11/573)	0.312
Coryza	8.38 (16/191)	7.50 (43/573)	0.754
Cough	58.12 (111/191)	57.24 (328/573)	0.866
Diarrhoea	18.85 (36/191)	13.26 (76/573)	0.076
Dyspnoea	60.73 (116/191)	57.77 (331/573)	0.498
Fatigue	10.99 (21/191)	9.77 (56/573)	0.677
Fever	70.16 (134/191)	65.27 (374/573)	0.250
Headache	3.14 (6/191)	4.36 (25/573)	0.532
Myalgia	0.52 (1/191)	2.09 (12/573)	0.203
SaO ₂ <95%	57.59 (110/191)	55.67 (319/573)	0.674
Respiratory discomfort	62.83 (120/191)	55.15 (316/573)	0.064
Sorethroat	14.66 (28/191)	14.14 (81/573)	0.905
Vomit	16.23 (31/191)	14.14 (81/573)	0.480
Other symptoms	31.94 (61/191)	31.94 (183/573)	>0.999
Comorbidities, %			
Chronic cardiovascular disease	35.08 (67/191)	34.90 (200/573)	>0.999
Chronic hematologic disease	2.09 (4/191)	3.14 (18/573)	0.619
Asthma	6.28 (12/191)	9.08 (52/573)	0.291
Chronic neurological disease	9.42 (18/191)	10.65 (61/573)	0.683
Chronic pulmonary disease	5.24 (10/191)	5.41 (31/573)	>0.999
Immunocompromised	7.85 (15/191)	9.08 (52/573)	0.660
Chronic renal disease	3.14 (6/191)	2.27 (13/573)	0.591
Obesity	3.14 (6/191)	4.54 (26/573)	0.532
Intervention, %			
Antiviral against influenza	13.09 (25/191)	12.04 (69/573)	0.704
ICU admission	46.60 (89/191)	46.60 (267/573)	>0.999

Ventilation	66.49 (127/191)	67.36 (386/573)	0.859
Respiratory viral infection	2.62 (5/191)	1.22 (7/573)	0.187
Vaccination against influenza	8.90 (17/191)	7.50 (43/573)	0.536
Vaccination against SARS-CoV-2	1.57 (3/191)	0.18 (1/573)	0.050

Table S3. E-values for multivariate Cox regression

	E-value
Age	1.06
Ageusia	1.42
Antiviral	1.25
Asthma	1.78
Asymptomatic	1.90
Ethnicity: Hispanic/African	1.26
Location: Center West	1.32
Chronic hematologic disease	1.50
Chronic cardiovascular disease	1.86
Chronic liver disease	2.08
Chronic neurological disease	2.27
Chronic renal disease	2.01
Coryza	1.56
Cough	1.50
Diabetes	1.58
Down syndrome	1.80
Fatigue	1.32
Fever	1.21
Immunocompromised	1.98
Location: North	1.91
Location: Northeast	1.79
SaO ₂ <95%	1.70
Obesity	1.40
Chronic pulmonary disease	1.53
Respiratory discomfort	1.29
Sorethroat	1.30
Respiratory viral infection	1.60
Vaccination against influenza	1.53
Vomit	1.22

Table S4. Difference in characteristics after propensity score matching (not matching for Time to recover)

	Paediatric patients with Down syndrome (n)	Paediatric patients without Down syndrome (n)	p-value
Age, y, median [IQR]	4.86 [0.934,12.44] (138)	4.10 [0.898,12.84] (414)	0.783
Male, %	48.55 (67/138)	50.72 (210/414)	0.695
Dead, %	0 (0/138)	0 (0/414)	>0.999
Time to recover, median [IQR] d	9 [5,18] (138)	6 [3,15] (414)	0.005
Region, %			
North	7.25 (10/138)	4.11 (17/414)	0.170
Northeast	15.22 (21/138)	16.18 (67/414)	0.893
Southeast	44.93 (62/138)	46.14 (191/414)	0.844
Center West	10.14 (14/138)	9.42 (39/414)	0.868
South	22.46 (31/138)	24.15 (100/414)	0.730
Ethnicity, %			
Caucasian	59.42 (82/138)	59.66 (247/414)	>0.999
Asian	0.73 (1/138)	0.73 (3/414)	>0.999
Latino/African	39.86 (55/138)	39.61 (164/414)	>0.999
Indigenous	0.00 (0/138)	0.00 (0/414)	>0.999
Signs and symptoms, %			
Asymptomatic	0.73 (1/138)	1.21 (5/414)	>0.999
Abdominal pain	5.80 (8/138)	7.00 (29/414)	0.699
Anosmia	0.73 (1/138)	1.21 (5/414)	>0.999
Ageusia	0.73 (1/138)	1.21 (5/414)	>0.999
Coryza	7.97 (11/138)	7.00 (29/414)	0.706
Cough	59.42 (82/138)	59.66 (247/414)	>0.999
Diarrhoea	21.01 (29/138)	22.95 (95/414)	0.724
Dyspnoea	59.42 (82/138)	56.28 (233/414)	0.552
Fatigue	9.42 (13/138)	10.63 (44/414)	0.749
Fever	73.19 (101/138)	67.63 (280/414)	0.243
Headache	2.90 (4/138)	5.80 (24/414)	0.261
Myalgia	0.73 (1/138)	2.90 (12/414)	0.201
SaO ₂ <95%	56.52 (78/138)	55.80 (231/414)	0.921
Respiratory discomfort	58.70 (81/138)	52.17 (216/414)	0.200
Sorethroat	15.22 (21/138)	11.35 (47/414)	0.234
Vomit	15.22 (21/138)	18.36 (76/414)	0.441
Other symptoms	31.88 (44/138)	37.20 (154/414)	0.305
Comorbidities, %			
Chronic cardiovascular disease	31.16 (43/138)	30.92 (128/414)	>0.999
Chronic hematologic disease	2.17 (3/138)	2.17 (9/414)	>0.999
Asthma	7.97 (11/138)	9.42 (39/414)	0.733
Chronic neurological disease	6.52 (9/138)	10.14 (42/414)	0.237
Chronic pulmonary disease	5.80 (8/138)	6.76 (28/414)	0.843
Immunocompromised	7.25 (10/138)	7.97 (33/414)	0.857
Chronic renal disease	3.62 (5/138)	2.66 (11/414)	0.562
Obesity	1.45 (2/138)	1.93 (8/414)	>0.999
Intervention, %			
Antiviral against influenza	11.59 (16/138)	10.87 (45/414)	0.875

ICU admission	41.30 (57/138)	44.20 (183/414)	0.620
Ventilation	63.77 (88/138)	64.01 (265/414)	>0.999
Respiratory viral infection	3.62 (5/138)	1.93 (8/414)	0.327
Vaccination against influenza	9.42 (13/138)	6.76 (28/414)	0.348
Vaccination against SARS-CoV-2	2.17 (3/138)	0.97 (4/414)	0.374

Figure S1. Histograms showing common support in propensity score matching (not match for Dead)

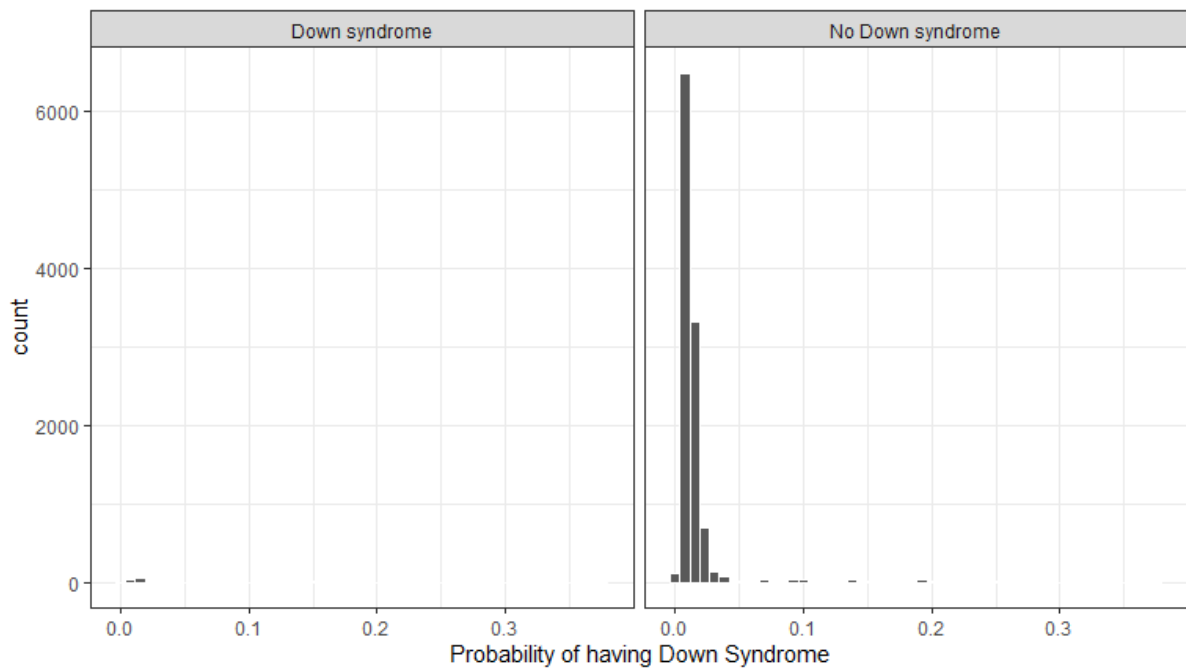


Figure S2. Histograms showing common support in propensity score matching (not match for Time to recover)

