

Table S1. Baseline demographics, clinical, laboratory characteristics and outcomes of Delta variant-infected patients with different duration of viral shedding

	Total (n=374)	Viral shedding > 21 days (n=255)	Viral shedding ≤ 21 days (n=119)	P value
Demographics and clinical characteristics				
Sex				0.173
Female	227 (60.7)	161 (63.1)	66 (55.5)	
Male	147 (39.3)	66 (55.5)	53 (44.5)	
Age, years	50 (39-65)	50 (41-66)	49 (34-61)	0.066
18-59	258 (69.0)	169 (66.3)	89 (74.8)	0.119
≥60	116 (31.0)	86 (33.7)	30 (25.2)	
With any comorbidity	106 (28.3)	75 (29.4)	31 (26.1)	0.502
Hypertension	78 (20.9)	57 (22.4)	21 (17.6)	0.34
Diabetes	31 (8.3)	25 (9.8)	6 (5.0)	0.158
Heart disease	12 (3.2)	7 (2.7)	5 (4.2)	0.531
Carcinoma history	8 (2.1)	8 (3.1)	0 (0.0)	0.06
Asthma	6 (1.6)	5 (2.0)	1 (0.8)	0.669
Autoimmune diseases	4 (1.1)	3 (1.2)	1 (0.8)	1.000
Vaccination Status				0.021
Unvaccinated	115 (30.7)	89 (34.9)	26 (21.8)	
Partially vaccinated	74 (19.8)	51 (20.0)	23 (19.3)	
Fully vaccinated	185 (49.5)	115 (45.1)	70 (58.8)	
Time from illness onset to hospitalization, days	2.0 (1.0- 4.0)	3.0 (1.0- 4.0)	2.0 (1.0- 4.0)	0.325
Symptoms				
Fever	118 (31.6)	81 (31.8)	37 (31.1)	1.000
Cough	188 (50.3)	130 (51.0)	58 (48.7)	0.739
Sputum production	68 (18.2)	47 (18.4)	21 (17.6)	0.887
Shortness of breath	12 (3.2)	10 (3.9)	2 (1.7)	0.352
Nausea or vomiting	6 (1.6)	5 (2.0)	1 (0.8)	0.774
Abdominal pain or diarrhea	21 (5.6)	13 (5.1)	8 (6.7)	0.630
Loss of smell or taste	15 (4.0)	8 (3.1)	7 (5.9)	0.258
Myalgia	12 (3.2)	8 (3.1)	4 (3.4)	1.000
Stuffy nose or runny nose	53 (14.2)	32 (12.5)	21 (17.6)	0.204
Headache or dizziness	27 (7.2)	22 (8.6)	5 (4.2)	0.138
Fatigue	73 (19.5)	53 (20.8)	20 (16.8)	0.403
Pharyngeal discomfort	86 (23.0)	63 (24.7)	23 (19.3)	0.292
Blood laboratory findings				
C-reactive protein-mg/L	5.4 (2.1-14.3)	5.2 (2.5-13.5)	5.8 (1.3-17.0)	0.804
>10	131 (35.0)	84 (32.9)	47 (39.5)	0.245
Procalcitonin, ng/mL	0.04(0.02-0.07)	0.04(0.03-0.06)	0.004(0.002-0.007)	0.807
<0.1	332/371 (89.5)	227/253 (89.7)	105/118 (89.0)	0.569
0.1-0.5	37/371 (10.0)	24/253 (9.5)	13/118 (11.0)	
>0.5	2/371 (0.5)	2/253 (0.8)	0 (0.0)	
Interleukin-6, pg/mL	9.80 (2.77-20.52)	9.37 (2.19-20.41)	10.27 (4.53-20.51)	0.455
>7	223/371 (60.1)	150/253 (59.3)	73/118 (61.9)	0.720
White blood cell count, × 10 ⁹ /L	4.83(3.92-5.99)	4.86(3.94-5.91)	4.81(3.86-6.30)	0.749
<4	108 (28.9)	71 (27.8)	37 (31.1)	0.053
4-10	259 (69.3)	182 (71.4)	77 (64.7)	
>10	7 (1.9)	2 (0.8)	5 (4.2)	
Neutrophil count, × 10 ⁹ /L	3.02 (2.18- 4.08)	3.04 (2.26- 3.89)	2.94 (2.06- 4.23)	0.821
Lymphocyte count, × 10 ⁹ /L	1.16(0.89-1.55)	1.13(0.86-1.48)	1.24(0.99-1.63)	0.020

<0.8	67 (17.9)	52 (20.4)	15 (12.6)	0.082
Hemoglobin, g/L	132. (123.0- 146.0)	131.0 (123.0- 145.0)	134.0 (123.5- 147.0)	0.350
Platelet count, $\times 10^9/\text{L}$	157.0(122.0-193.0)	152.0(119.0-190.0)	162.0(130.0-200.5)	0.115
<100	45 (12.0)	34 (13.3)	11 (9.2)	0.308
Albumin, g/L	42.7 (40.3-45.3)	42.7 (40.2-45.2)	42.5 (40.5- 45.4)	0.502
Total bilirubin, umol/L	9.8 (7.7- 12.4)	9.6 (7.6- 12.6)	9.9 (7.8- 12.1)	0.884
AST, IU/L	17.0 (13.8-23.1)	17.2 (14.3-23.0)	16.1 (13.7-23.1)	0.186
>40	32 (8.6)	20 (7.8)	12 (10.1)	0.552
ALT, U/L	17.9 (12.2-28.5)	17.3 (12.2-28.0)	19.5(12.5-29.6)	0.522
>40	52 (13.9)	34 (13.3)	18 (15.1)	0.634
Urea nitrogen, mmol/L	4.36 (3.59- 5.23)	4.41 (3.59- 5.26)	4.26 (3.62- 5.20)	0.459
Creatinine, $\mu\text{mol}/\text{L}$	60.9 (52.0-74.8)	59.4 (51.2-74.1)	64.4 (54.8-76.1)	0.054
>104	8 (2.1)	5 (2.0)	3 (2.5)	0.713
eGFR, ml/min	111.95 (102.23-121.41)	111.67 (102.67-119.67)	113.49 (101.10-122.63)	0.637
<90	28/272 (10.3)	20/179 (11.2)	8/93 (8.6)	0.652
Creatine kinase, U/L	71.0 (50.0-111.8)	69.0 (49.5-114.0)	72.0 (51.5-104.0)	0.792
>174	45 (12.0)	33 (12.9)	12 (10.1)	0.497
CK-MB, ng/ml	0.50 (0.30-0.80)	0.50(0.30-0.80)	0.50 (0.3-0.90)	0.861
>3.1	7/321 (2.2)	6/217 (2.8)	1/104 (1.0)	0.531
Myoglobin, ng/mL	34.05 (21.10-57.38)	32.90(20.90-58.20)	34.60(22.65-53.45)	0.680
>106	31/320 (9.7)	20/217 (9.2)	11/103 (10.7)	0.833
Troponin I, pg/ml	3.00(0.70-7.30)	3.00(0.80-7.60)	3.05(0.48-5.78)	0.369
>15.6	28/317 (8.8)	22/213 (10.3)	6/104 (5.8)	0.257
LDH, IU/L	235.0(202.0-278.0)	238.0(205.5-283.0)	232.0(200.0-269.5)	0.265
>245	168 (44.9)	120 (47.1)	48 (40.3)	0.264
Prothrombin time, s	11.1 (10.8- 11.6)	11.1 (10.8- 11.6)	11.2 (10.8- 11.6)	0.612
D-dimer, mg/L	0.39 (0.25-0.61)	0.38 (0.24-0.59)	0.41(0.26-0.69)	0.537
>0.55	109 (29.1)	73 (28.6)	36 (30.3)	0.807
FDPs, ug/ml	2.70 (1.70- 5.35)	2.70 (1.70- 4.10)	3.10 (1.55- 5.40)	0.190
SARS-COV-2 IgM (S/CO)	0.21 (0.06- 0.99)	0.15 (0.05- 0.68)	0.41 (0.13- 1.95)	<0.001
IgM Positive	93 (24.9)	49 (19.2)	44 (37.0)	<0.001
SARS-COV-2 IgG (S/CO)	1.38 (0.15- 9.85)	0.73 (0.11- 4.32)	4.16 (0.51- 33.79)	<0.001
IgG Positive	199 (53.2)	121 (47.5)	78 (65.5)	0.002
Viral load (Ct value) *				
ORF1ab gene	23.0 (19.0- 27.0)	22.0 (19.0- 26.0)	25.0 (21.0- 30.0)	0.001
N gene	20.0 (16.0- 24.8)	19.0 (15.0- 23.0)	22.0 (18.5- 28.0)	<0.001
Outcomes				
Severe illness	20 (5.3)	14 (5.5)	6 (5.0)	0.858
Mechanical ventilation	2 (0.5)	1 (0.4)	1 (0.8)	1.000

1. Data were expressed as median (interquartile range), n (%) or n/N (%). Comparisons between groups were made using Mann-Whitney U-test, or Chi-Square test, as appropriate.

2. COPD, chronic obstructive pulmonary disease; CK-MB, creatine kinase-myocardial band; AST, Aspartate aminotransferase; ALT, Alanine aminotransferase; eGFR, estimated glomerular filtration rate; LDH, Lactate dehydrogenase FDPs, fibrinogen degradation products; Ct, cycle threshold; SARS-COV-2, severe acute respiratory syndrome coronavirus 2.

*SARS-COV-2 viral load from upper respiratory samples was evaluated by using quantitative reverse transcription polymerase chain reaction (qRT-PCR). The Ct value from qRT-PCR was used to represent the viral load.

Table S2 Factors associated with early viral clearance

	Crude OR (95% CI)	p value	Adjusted OR (95% CI)	P value
Female sex (vs male)	1.37 (0.88-2.14)	0.158	1.42 (0.89-2.27)	0.143
Age≥60 years (vs 18 to 59)	0.66 (0.40-1.07)	0.098	1.01 (0.53-1.92)	0.973
Comorbidity present (vs not present)	0.85 (0.52-1.38)	0.502	1.11 (0.63-1.92)	0.725
Vaccination status (vs unvaccinated)				
Partially vaccinated	1.54 (0.80-2.97)	0.196	1.36 (0.66-2.76)	0.400
Fully vaccinated	2.08 (1.24-3.58)	0.006	2.23 (1.17-4.35)	0.017
Time from illness onset to admission, days	0.96 (0.87-1.04)	0.327	0.89 (0.80-0.98)	0.018
Viral load*	1.07 (1.04-1.11)	<0.001	1.10 (1.06-1.14)	<0.001

*The Ct value from quantitative reverse transcription polymerase chain reaction was used to represent the viral load of SARS-CoV-2 in the upper respiratory tract.

OR , odds ratio; CI, confidence intervals