## Supplementary Table S1. Epidemiological, virological and clinical features of cases of prolonged SARS-CoV-2 infections in

Reference	Age (years), gender	Cause of immunodepression	Duration of viral shedding (days) <sup>a</sup>	Treatment				Number of amino acid	Outcome
				Remdesivir	Convalescent plasma	Anti-spike antibody cocktail	Other(s)	substitutions/deletions (including in spike (S) gene)	
1	45, Male	Severe antiphospholipid syndrome	151	D0 (5 days), D72 (10 days), D105 (5 days), D151 (5 days)	-	D143	Glucocorticoids, cyclophosphamide, intermittent eculizumab and rituximab, ruxolitinib	24 substitutions, 3 deletions; spike: n= 13 (12 substitutions, 1 deletion) among which substitution N501Y present in variants 20I/501Y.V1, 20H/501Y.V2 and 20J/501Y.V3 <sup>b</sup> , and E484K present in variants 20H/501Y.V2 and 20J/501Y.V3 <sup>b</sup>	Death on D154
2	N.a.	Marginal B cell lymphoma (received B cell depletion therapy; hypogammaglobulinem ia)	101	D41, D54, D93	D63, D65, D95	-	-	Spike: n= 5 among which substitution N501Y and deletion H69/V70 present in 20I/501Y.V1 <sup>b</sup>	Not reported
3.	60, Male	Mantle cell lymphoma	156	D30, D122	D33, D122	-	CD20 bispecific antibody, second B-cell directed antibody, cyclophosphamide, doxorubicine, prednisone	6 substitutions, in ORF1a (n= 4), ORF1b (n= 1), ORF3a (n= 1)	Pursued home hospice care
4	75, Male	Multiple myeloma	71	D5-10	D2, D58	-	Dexamathasone (D63-74)	Spike: n= 9 between D4-67 among which D215G present in 20H/501Y.V2 <sup>b</sup> , Y144 deletion present in 20I/501Y.V1 <sup>c</sup> , and N501T at a position mutated in variants 20I/501Y.V1, 20H/501Y.V2 and 20J/501Y.V3 <sup>b</sup>	Death on D74
5	60-70, Male	Non-Hodgkin lymphoma	268	D47-51, D77-86, D178-182, D205-209	D88	-	Darunavir/ritonavir, hydroxychlorquine, IV methylprednisolone, tocilizumbab, ceftaroline	<ul> <li>26 substitutions (15 in ORF1a, 1 in ORF1b,</li> <li>7 in spike, 3 in ORF3a); spike: n= 7 among which H69Y/P and V70G at positions mutated in variant 20I/501Y.V1<sup>b</sup></li> </ul>	Death on D271
6	53, Female	Follicular lymphoma	85	D63-D72, D80-84	D85 <sup>c</sup>	-	-	No genome sequencing performed	-
7	17, Female	Pre-B-cell acute lymphoblastic leukemia	100	D13-D22, D60-D69	D61	-	Hydroxychloroquine 2 days; methylprednisolone	No genome sequencing performed	Still PCR-positive on day 100; off supplemental oxygen

immunocompromized patients who received remdesivir

## Supplementary Table S1 (continued)

Reference	Age (years),	Cause of	Duration of viral	Treatment				Number of amino acid	Outcome
	gender	minunodepression	shedding (days) –	Remdesivir	Convalescent plasma	Anti-spike antibody cocktail	Other(s)	(S) gene)	
8	50-60, Male	Chronic lymphocytic leukemia	63	D23-33, D45-55	D58	-	-	No genome sequencing performed	-
9	41, Female	Severe hypogammaglobulinem ia	75	-	D71, D72	-	Prednisone	No genome sequencing performed	Discharged
10	70s, Female	Follicular lymphoma	>134	-	x5	-	Steroids	24 substitutions and two deletion; spike: 3 substitutions including E484K present in variants 20H/501Y.V2 and 20J/501Y.V3 <sup>b</sup> ; one inframe deletion Y144 present in variant 20I/501Y.V1 <sup>c</sup>	Death on day 156
11	71, Female	Chronic lymphocytic leukemia, hypogammaglobulinem ia	105	-	D70, D80	-	-	Six substitutions at day 49 including two in the spike and one deletion; 3 additional substitutions (2 at day 70, 1 at day 85) and one additional deletion at day 70 (a 12-bp deletion in the spike NTD of S1)	N.a.
Present study	66, Male	Burkitt lymphoma	112	D40 (6 days)	D77, D78	-	Hydroxychloroquine 10 days azithromycin 5 days, dexamethasone 10 days	Nine substitutions including one in the spike	Death on day 119

<sup>a</sup> As assessed by qPCR; <sup>b</sup> 20I/501Y.V1= "UK" variant, 20H/501Y.V2= "South African" variant, and 20J/501Y.V3= "Brazilian" variant; <sup>c</sup> at the end of second cure of remdesivir. D, day(s); N.a., not available

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