

Pt No.	Disease	Treatments in the past 2 years								Date of last treatment (mo-yr)	Initial Vaccine	Booster Vaccine	Anti-S Ab before booster (AU/mL)	Anti-S Ab after booster (AU/mL)	Change in anti-S Ab level
		None	IVIg	Anti-CD20 Ab	BTKi	Chemo-therapy	Venet-oclax	CAR T	HSCT						
seronegative before and after booster vaccination															
1	DLBCL			●		●			●	Nov-20	BNT162b2	mRNA-1273	<0.4	<0.4	0
2	FL			●		●				Jun-19	mRNA-1273	mRNA-1273	<0.4	<0.4	0
3	FL			●						Jan-21	mRNA-1273	Ad26.COV2.S	<0.4	<0.4	0
4	FL			●						Dec-20	mRNA-1273	BNT162b2	<0.4	<0.4	0
5	FL			●		●				Jan-21	mRNA-1273	mRNA-1273	0.6	<0.4	0
6	FL			●		●				Jan-21	BNT162b2	Ad26.COV2.S	<0.4	<0.4	0
7	EBV+LPD			●						Jan-21	BNT162b2	BNT162b2	<0.4	<0.4	0
8	WM			●	●					Aug-21	BNT162b2	Ad26.COV2.S	<0.4	<0.4	0
9	NHL			●						Dec-20	BNT162b2	Ad26.COV2.S	<0.4	<0.4	0
10	CLL			●	●					Feb-21	BNT162b2	Ad26.COV2.S	<0.4	<0.4	0
11	CLL			●						Jun-21	BNT162b2	mRNA-1273	<0.4	<0.4	0
12	CLL			●			●			Jul-21	BNT162b2	Ad26.COV2.S	<0.4	<0.4	0
13	CLL			●	●					Aug-21	BNT162b2	Ad26.COV2.S	<0.4	<0.4	0
14	CLL	○								None	BNT162b2	BNT162b2	<0.4	<0.4	0
15	WM		●		●					Aug-21	BNT162b2	BNT162b2	<0.4	<0.4	0
16	WM		●							Aug-21	BNT162b2	Ad26.COV2.S	<0.4	<0.4	0
17	MM					●				Apr-21	mRNA-1273	mRNA-1273	<0.4	<0.4	0
vaccinatio Seroconversion: seronegative after full vaccination but positive afer booster vaccination															
18	CLL			●	●					Aug-21	mRNA-1273	BNT162b2	<0.4	2.2	2.2
19	WM		●	●	●	●				Jun-21	BNT162b2	Ad26.COV2.S	<0.4	2.3	2.3
20	FL				●		●			Aug-21	BNT162b2	Ad26.COV2.S	<0.4	2.9	2.9
21	CLL				●					Apr-21	BNT162b2	BNT162b2	<0.4	3.0	3.0
22	CLL/MZL			●		●				Sep-20	mRNA-1273	Ad26.COV2.S	<0.4	3.2	3.2
23	CLL	○								None	BNT162b2	Ad26.COV2.S	<0.4	3.6	3.6
24	CLL				●		●		●	Jul-21	BNT162b2	BNT162b2	<0.4	5.2	5.2
25	FL			●						Sep-20	mRNA-1273	Ad26.COV2.S	0.6	12.5	11.9
26	CLL	○								None	BNT162b2	Ad26.COV2.S	<0.4	16.9	16.9
27	DLBCL			●		●				Jun-20	BNT162b2	BNT162b2	<0.4	23	23.1
28	CLL	○								None	mRNA-1273	Ad26.COV2.S	<0.4	22.6	22.6
29	CLL	○								None	BNT162b2	Ad26.COV2.S	<0.4	125	125
30	CLL				●					Aug-21	mRNA-1273	Ad26.COV2.S	<0.4	157	157
31	WM				●					Aug-21	BNT162b2	mRNA-1273	<0.4	233	233
32	CLL	○								Apr-19	BNT162b2	mRNA-1273	<0.4	816	816
33	SMZL			●						Dec-20	BNT162b2	mRNA-1273	<0.4	357	357
34	CLL	○								None	BNT162b2	mRNA-1273	<0.4	623	623
35	MM		●			●				Jun-21	BNT162b2	mRNA-1273	<0.4	1003	1003
36	CLL				●					Dec-20	BNT162b2	BNT162b2	<0.4	1048	1048
37	CLL	○								None	BNT162b2	BNT162b2	<0.4	2500	2500
38	CLL			●	●					Apr-19	Ad26.COV2.S	BNT162b2	<0.4	2500	2500
seropositive patients after booster vaccination															
39	MM		●					●		Feb-21	mRNA-1273	mRNA-1273	2.3	120	117
40	WM			●						Feb-20	BNT162b2	BNT162b2	8.1	>2500	2492
41	CLL				●					Aug-21	BNT162b2	Ad26.COV2.S	16.0	>2500	2484
42	CLL				●					Aug-21	mRNA-1273	BNT162b2	16.7	487	470
43	CLL		●		●					Jan-21	mRNA-1273	mRNA-1273	41.3	698.0	657
44	CLL	○								None	BNT162b2	Ad26.COV2.S	55.1	>2500	2445
45	CLL	○								None	mRNA-1273	BNT162b2	90.4	546	455
46	MM					●				Dec-20	mRNA-1273	BNT162b2	113	2500	2472
47	CLL	○								None	BNT162b2	BNT162b2	243	2500	2257
48	CLL	○								None	BNT162b2	BNT162b2	372	2500	2128
49	WM			●	●	●				Mar-21	mRNA-1273	Ad26.COV2.S	885.0	2500	1615

Abbreviations: CLL, chronic lymphocytic leukemia; CLL /MZL, CLL and marginal zone lymphoma; LBCL, diffuse large B cell lymphoma; EBV+LPD, Epstein-Barr virus positive lymphoproliferative disease, FL, follicular lymphoma; NHL, non-Hodgkin lymphoma; MM, multiple myeloma; SZML, splenic marginal zone lymphoma, and WM, Waldenström's macroglobulinemia.

Treatment designations: None, no malignancy-targeted treatments in the past two years; IVIG, intravenous immunoglobulins; Anti-CD20 Ab: black and red dots are rituximab and obinutuzumab, respectively; BTK inhibitors (BTKi): black, blue, and orange dots are ibrutinib, acalabrutinib, zanubrutinib, respectively; CAR T, chimeric antigen receptor T cell-therapy; HSCT, hematopoietic stem cell transplant.

Figure S1. Timeline of analysis.

Patients received one (V1) or two (V2) vaccinations approximately one month apart. An analysis of anti-S antibody levels was done before (L1) and after (L2) booster vaccination (B). The median days and ranges between these intervals are shown.

