

Supplementary Table 1. Types of correlative analyses run on samples from NCT #04663347.

Patient N.	Pre-Tx		On-Tx			POD	
	IHC	FC	IHC	FC	scRNA	IHC	FC
1	yes	no	no	no	no		
2	yes	yes	no	no	no		
3	yes	no	yes	no	no		
4	yes	no	no	no	no		
5	yes	yes	yes	no	no		
6	yes	yes	yes	no	no		
7	yes	yes	yes	no	no		
8	yes	no	yes	yes	yes	yes	no
9	yes	yes	no	no	yes	yes	no
10	yes	no	yes	yes	yes		
11	yes	no	yes	yes	yes		
12	yes	yes	no	no	no		
13	yes	yes	yes	no	no		
14	yes	yes	no	no	no		
15	yes	yes	yes	no	yes		
16	yes	yes	yes	no	no	yes	yes
17	yes	no	yes	no	no		
18	yes	yes	yes	no	no		
19	yes	yes	no	no	yes		
20	yes	yes	yes	yes	yes		
21	yes	yes	yes	yes	no		
22	yes	yes	no	no	no		

Supplementary Table 2. Antibody clones used for immunohistochemistry analysis.

Antigen	Clone	Manufacturer
BCL2	124	Ventana
	PG-B6p	Dako
CD2	MRQ11	Cell Marque
CD3	LN10	Leica
CD4	SP35	Cell Marque

CD5	SP19	Ventana
	4C7	Leica
CD7	MRQ56	Cell Marque
	LP15	Leica
CD8	SP57	Ventana
	4B11	Leica
CD10	SP27	Ventana
	56C6	Leica
CD19	BT51E	Leica
CD20	L26	Dako
CD21	1F8	Dako
CD23	SP23	Ventana
	1B12	Leica
CD30	Ber-H2	Dako
CD79a	SP18	Ventana
	11E3	Leica
cMYC	Y69	Ventana
Cyclin D1	EPR2241	Abcam
	SP4	Thermo Scientific
EBER-ISH	N/A	Ventana
FOXP1	JC12	Abcam
Granzyme B	GrB7	Dako
HGAL	1H1-A7	Invitrogen
IGD	Polyclonal	Cell Marque
KI67-MIB1	MIB1	Dako
	30-9	Ventana
LMO2	1A9-1	Santa Cruz
MUM1	MUM1p	Dako
	EAU32	Leica
OCT2	MRQ-2	Cell Marque
P53	D07	Ventana
PAX5	SP34	Ventana
	1EW	Leica
SOX-11	MRQ58	Cell Marque
TDT	Polyclonal	Cell Marque
	SEN28	Leica
TIA1	2G9A10F5	Biogenex

Supplementary Table 3. Antibody clones used for flow cytometry analysis.

Antigen	Clone	Fluorochrome	Manufacturer	Catalog
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Kappa	Polytypic	FITC	Agilent	F043401-1
CD8	REA734	FITC	Miltenyi	130-110-815
Lambda	Polytypic	PE	Agilent	R043701-1
CD56	N901	PE	Beckman Coulter	IM2073U
CD25	BC96	PE-Dazzle594	BioLegend	302646
CD22	SJ10.1H11	PC5.5	Beckman Coulter	A80712
TCRCβ1	JOVI.1	BB700	BD Biosciences	7497974
CD19	J3-119	PC7	Beckman Coulter	IM3628U
CD10	ALB1	APC	Beckman Coulter	IM3633
CD7	8H8.1	APC-Alexa700	Beckman Coulter	A70201
CD45	2D1	APC-H7	BD Biosciences	641408
CD5	L17F12	BV421	Biolegend	364029
CD38	HIT2	BV480	BD Biosciences	566137
CD279	EH12.2H7	BV605	BioLegend	329924
CD20	2H7	BV650	BD Biosciences	563780
TCRγδ	11F2	BV711	BD Biosciences	624148
CD2	RPA-2.10	BV786	BD Biosciences	740960
CD26	M-A261	BUV395	BD Biosciences	744454
CD4	SK3	BUV563	BD Biosciences	612912
CD3	UCHT1	BUV737	BD Biosciences	612750
CD14	M5E2	BUV805	BD Biosciences	612903

Supplementary Table 4. Pathology review of FFPE specimens.

Disease	Patient ID	Best Response	Timepoint	CD20	PAX5	Other
FL	10	CR	On-Tx	Patchy membranous and cytoplasmic staining with variable downregulation (negative to dim to moderate intensity)	Strong nuclear	No other B cell markers
	15	CR	On-Tx	Negative	Strong nuclear	CD79a strong membranous staining
	16	CR	PD	Negative	Strong nuclear	No other B cell markers
	20	PD	On-Tx	Negative	Not performed	CD10 variable membranous staining
DLBCL	6	On-Tx	CR	Positive on necrotic cells	Not performed	
	7	On-Tx	CR	Positive on necrotic cells	Not performed	
	8	On-Tx	PR	Strong and diffusely membranous	Not performed	No other B cell markers
		POD	PR	Negative	Strong nuclear	No other B cell markers
	9	POD	PR	Negative	Strong nuclear	CD19 diffusely positive