

Aggressive large B-cell lymphoma with plasma cell differentiation: immunohistochemical characterization of plasmablastic lymphoma and diffuse large B-cell lymphoma with partial plasmablastic phenotype

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Online Supplementary Table S1. Clinical features of DLBCL cases.

Clinical features of DLBCL cases	Value (% of total)
Number	111
Median age, years (range)	62 (23 - 88)
Males	58 (52%)
Nodal/Extranodal	
Nodal-based disease	90 (81%)
Extranodal disease	21 (19%)
Stage	
I	9 (8%)
II	25 (23%)
III-IV	66 (60%)
IPI score (number of IPI factors)	
Low risk (0,1)	26 (24%)
Low – intermediate risk (2)	34 (31%)
High – intermediate risk (3)	32 (29%)
High risk (4,5)	16 (15%)

Most of these patients received CHOP therapy (97 patients, 87%), 9 (8%) were treated with CHOP-like therapies and 5 (4.5%) with a MegaCHOP regimen. All patients received rituximab and anthracycline-based regimens.

Online Supplementary Table S2. Details of antibodies used and antigen retrieval methods.

Antibody	Clone	Source	Antigen retrieval/Visualization method	Dilution
CD20	L26	DAKO	EDTA 1 mM pH 9/ FLEX (DAKO)	1:50
PAX5	PolyclonalGoat	Santa Cruz Biotechnology, Santa Cruz, CA, USA	Citrate 10 mM pH 6/ FLEX (DAKO)	1:250
CD10	56C6	Novocastra, Newcastle, UK	Citrate 10 mM pH 6.5 / Novolink (Novocastra)	1:10
BCL6	GI191E/A8	CNIO, Madrid, Spain	Citrate 10 mM pH 6.5 and Proteinase K / Novolink (Novocastra)	1:300
GCET1	RAM	CNIO, Madrid, Spain	EDTA 1 mM pH 8 / Novolink (Novocastra)	1:4
KLHL6	92C	CNIO, Madrid, Spain	EDTA 1 mM pH 9/ FLEX (DAKO)	1:50
MUM1/IRF4	PolyclonalGoat	Santa Cruz Biotechnology, Santa Cruz, CA, USA	Citrate 10 mM pH 6.5/ LSAB (DAKO)	1:250
PRDM1/BLIMP1	ROS	CNIO, Madrid, Spain	EDTA 1 mM pH 8/ Novolink (Novocastra)	1:10
XBP1s	143F	CNIO, Madrid, Spain	EDTA 1 mM pH 9/ FLEX+ (DAKO)	1:35
CD38	VS38	DAKO	EDTA 1 mM pH 9/ FLEX (DAKO)	1:50
CD138	M115	DAKO	EDTA 1 mM pH 9/ FLEX (DAKO)	1:50
KL67	MIB1	DAKO	Citrate 10 mM pH 6/ FLEX (DAKO)	1:100
p53	DO-7	DAKO	EDTA 1 mM pH 9/ FLEX (DAKO)	1:200

Online Supplementary Table S3. Clinical features of PBL cases.

N.	Sex	Age	Stage	Location at diagnosis	Extranodal disease	IPI	HIV	Treatment (number of cycles)	Response	Relapse	Current status
1	ND	ND	ND	GI tract	GI tract	ND	ND	ND	ND		ND
2	M	49	IV	Oral cavity	Oral cavity	1	Yes	CHOP (2)	PR		Lost
3	F	45	IV	Maxillary sinuses	Maxillary sinuses	1	Yes	CHOP (8)	CR		DWD
4	M	36	IV-B	Sphenoid bone	Sphenoid bone	2	Yes	CHOP + MTX A HIGH DOSES (1)	NR		DWD
5	M	59	IV-B	Oral cavity		ND	Yes	HAART	PR		DWD
6	M	42	IVA	LN		2	Yes	R-CHOP (6)	CR	Yes	AWD
7	M	40	II-A	LN		1	Yes	EPOCH (6)+ MTX + ARA-C	CR		AWOD
8	M	47	IV	Oral cavity	Oral cavity	3	Yes	R-CHOP (4)	CR		DWD
9	F	44	IV-B	LN	Bone marrow, lung, skin, spleen, liver, oral cavity	4	Yes	EPOCH (3)+ ESHAP (1)	NR		DWD
10	M	51	IV	GI tract	GI tract, lung, liver	4	ND	Surgical	ND		DWD
11	M	52	I-A	Nose	Nose	0	Yes	RT	PR		AWD
12	F	31	ND	Perirectal tissues	Perirectal tissues	ND	Yes	R-CHOP (6)	CR		DWOD
13	F	63	IIB	GI tract and skin	GI tract and skin	2	No	CODOX M-IVAX R (2) + R-CHOP (1)	CR	Yes	DWD
14	F	81	II	Oral cavity	Cavum	2	No	R-CHOP (4) + RT	CR		AWOD
15	F	38	I	Ear	Ear	0	Yes	HYPER-CVAD (2) +RT	PR		AWD
16	M	56	IIA	Maxillary sinuses	Maxillary sinuses	0	No	R-CHOP (6)	CR		AWOD
17	F	35	IV-A	Oral cavity	Oral cavity	ND	Yes	EPOCH (3)	NR	Yes	AWD
18	M	38	II	Oral cavity	Soft tissues, maxillary bone	1	Yes	EPOCH (4) + CHOP (1)	NR		DWD
19	ND	ND	ND	GI tract		ND	ND	ND	ND		ND
20	M	59	III-B	GI tract	GI tract	3	Yes	CHOP (8)	NR	Yes	DWD
21	M	82	ND	Oral cavity	Oral cavity	ND	No	ND	ND		Lost
22	M	50	ND	GI tract		ND	Yes	GENTAMICIN	ND		DWD
23	M	39	IV-B	GI tract	GI tract, lung, spleen, liver	3	Yes	EPOCH (6)	CR		AWOD
24	M	46	IV	Testicle	Testicle, lung, spleen	2	Yes	EPOCH (6), Surgical	CR	Yes	AWOD
25	M	84	IV-B	LN	GI tract, prostate, bladder	5	ND	Palliative			DWD
26	ND	ND	ND	ND		ND	ND	ND	ND		ND
27	F	84	ND	Skin		ND	ND	ND	ND		DWD
28	M	53	II	Pleura	Pleura, soft tissues, bone	2	No	CHOP-LIKE (5)	CR	No	AWOD
29	ND	ND	ND	LN		ND	ND	ND	ND		ND
30	ND	ND	ND	Uterine cervix	Uterine cervix	ND	ND	ND	ND		ND
31	M	73	II	LN		3	No	CHOP-LIKE (8) + RT	PR	No	AWOD
32	M	36	II	LN		ND	Yes	DBT	NR		DWD
33	M	45	IV	Oral cavity	Oral cavity	2	Yes	CHOP (8)	NE		Alive
34	M	47	IV	Pleura and bone marrow	Pleura and bone marrow	ND	Yes	Palliative	ND		DWD
35	F	76	IV-B	LN	Lung	4	No	R-CHOP (6)	CR		DWOD
36*	M	60	IVA	LN	Urinary Bladder	4	No	R-CHOP (6)	CR	Yes	DWD
37*	M	52	IVA	Lung		2	No	R-CHOP (6)	NR		AWD

M: male, F: female; GI: gastrointestinal, LN: lymph node, RT: radiotherapy, HAART: highly active antiretroviral therapy, CR: complete response, PR: partial response, NR: no response, NE: not evaluated; AWD: alive with disease; AWOD: alive without disease; DWD: dead with disease; DWOD: dead without disease; ND: no data available. Cases 36* and 37* were previously classified as DLBCL (see text).