Anti–programmed cell death protein 1–based salvage therapy for relapsed/refractory Hodgkin lymphoma: a multicenter real-world analysis

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Supplemental Material

Supplemental table 1: Detailed description of the number of cycles and salvage regimen

No of cycles x regimen	n
4x P-GVD	5
2x P-GVD	15
4x BV-Nivo	1
16x BV-Nivo	1
4x Pembro	2
8x Nivolumab	1
7x BV-Pembro	1
3x P-GVD	10
2x Pembrolizumab	1
2x P-ICE	3
3x N-ICE	1
3x Nivolumab	1
5x Pembrolizumab	1
6x Pembrolizumab	2
24x Nivolumab	1
4x Nivolumab	1

Supplemental table 2: Detailed description of the response to treatment

Response to salvage and HD-ASCT/allo, split by three subgroups including ICI mono, combined with BV or chemotherapy

		ICI + BV		ICI + Chemotherapy		ICI + mono		Total	
		N	%	N	%	N	%	N	%
Best overall response to HD-ASCT	CR	3	100	21	95.5	8	100	32/33	97
	PR	0	0	1	4.5	0	0	1/33	3
Best overall response pre HD-ASCT	CR	1	33.3	19	61.3	1	10	21/44	47.7
	PR	2	66.7	10	32.3	7	70	19/44	43.2
	SD	0	0	2	6.5	1	10	3/44	6.8
	PD	0	0	0	0	1	10	1/44	2.3

Response to salvage and HD-ASCT/allo, split by exact regimen

		BV + Nivo		BV + Pembro		N-ICE		P-ICE		P-GVD		Nivo		Pembro		Total	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Best overall response to HD-ASCT	CR	2	100	1	100	1	100	2*	100	18	94.7	4	100	4	100	32/33	97
	PR	0	0	0	0	0	0	0	0	1	5.3	0	0	0	0	1/33	3
Best overall response pre HD-ASCT	CR	1	50	1	100	0	0	3	100	16	59.3	0	0	0	0	21/44	47.7
	PR	1	50	0	0	1	100	0	0	9	33.3	3	75	4	100	19/44	43.2
	SD	0	0	0	0	0	0	0	0	2	0	1	25	0	0	3/44	6.8
	PD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1/44	2.3
Total		2	100	1	100	1	100	3	100	27	100	4	100	4	100	44	100

Response to salvage and HD-ASCT/allo in patients with one prior line of treatment, split by three subgroups including ICI mono, combined with BV or chemotherapy

		ICI + mono		ICI + BV		ICI + Chemotherapy		Total	
		N	%	N	%	N	%	N	%
Best overall response to HD-ASCT	CR	0	0	1	100	13	92.9	14/15	93.3
	PR	0	0	0	0	1	7.1	1/15	6.7
Best overall response pre HD-ASCT	CR	1*	100	1	100	11	55	13/22	59.1
	PR	0	0	0	0	8	40	8/22	36.4
	SD	0	0	0	0	1	5	1/22	4.5
	PD	0	0	0	0	0	0	0	0

Response to salvage and HD-ASCT/allo in patients with one prior line, exact regimens

		BV-Nivo		P-GVD		P-ICE		Pembrolizumab		Total	
		N	%	N	%	N	%	N	%	N	%
Best overall response to HD-ASCT	CR	1	100	13	92.9	0	0	0	0	14/15	93.3
	PR	0	0	1	7.1	0	0	0	0	1/15	6.7
Best overall response pre HD-ASCT	CR	1	100	10	52.6	1	100	1	100	13/22	59.1
	PR	0	0	8	42.1	0	0	0	0	8/22	36.4
	SD	0	0	1	5.3	0	0	0	0	1/22	4.5
	PD	0	0	0	0	0	0	0	0	0	0

Supplemental table 3: Immune related adverse events and deaths

Overview of immune related adverse events

Sex	Age at initial diagnosis	ASCT protocol	ASCT	irAE	PFS (m)	CTCAE	after cycle no (PD1-containing cycle)	Management	Outcome	PD1-reexposition
F	29	BEAM	Auto SCT	Thyreoiditis	6.8	°II	1	Carbimazole (intial hyperthyreosis), then switch to L-Thyoxin substitution (during hypothyreosis)	not resolved	No
F	21	BEAM	Auto SCT	Hepatitis	8	°III	2	140 mg Prednisolone (6d) / 100 mg (2d), no PD1-reexposition	resolved	No
F	68		No SCT	Pneumonitis	7	°III	4	60 mg Prednisolon (7 d), oxygen mask	resolved	No
M	59	Flu/Treo/ATG	Allo SCT	Pancolitis	75.5	°III	3	30d Prednisolone (start 100 mg/d).	resolved	Yes
M	44		No SCT	Pneumonitis	3.4	°III	1	34d Prednisolon (starting dose 1 mg/kg), oxygen mask	resolved	No

Overview of all deaths

Sex	**Age at initial diagnosis** (years)	**Age at death** (years)	**ASCT protocol**	**ASCT**	**Cause of death**	**Date of death**	**SV** (months)	**Progression**	**PFS** (months)
M	24	27	BEAM	Auto SCT	PD	18.11.2022	24.3	Yes	9.9
M	60	66	BEAM	Auto SCT	PD	08.03.2024	2.9	No	2.9
M	62	69	BEAM	Auto SCT	AML	26.06.2024	23.4	No	23.4
M	44	50		No SCT	unknown	24.12.2023	4.1	Yes	3.9