

Autologous hematopoietic cell transplantation for T-cell prolymphocytic leukemia: a retrospective study on behalf of the Chronic Malignancies Working Party of the EBMT

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<https://doi.org/10.3324/haematol.2023.284359>

Received: September 24, 2023.

Accepted: January 2, 2024.

Early view: January 11, 2024.

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Supplementary Table S1 Univariable probabilities/cumulative incidences (95% confidence intervals) at 2 years after auto-HCT for overall survival (OS), progression free survival (PFS), non-relapse mortality (NRM) and relapse incidence (RI). For the whole group of evaluable patients the 1-year and 2-year OS was estimated at 72% (95% CI 58-86%) and 44% (95% CI 28-59%), and the 1-year and 2-year PFS at 56% (95% CI 41-72%) and 36% (95% CI 21-51%). The 6-month, 1-year and 2-year RI was 20% (95% CI 8-33%), 41% (95% CI 26-56%), and 59% (95% CI 44-75%), while the 1-year, and 2-year NRM was 3% (95% CI 0-8%), and 5% (95% CI, 0-12%) respectively. The 1- and 2-year probabilities of OS and PFS were obtained using Kaplan-Meier methods and the 1- and 2-year cumulative incidence of NRM and RI was obtained using the crude cumulative incidence estimator. P-values were obtained with the log-rank test for OS and PFS and Gray's test for NRM and RI and events artificially censored at 4 years. BEAM: carmustine, etoposide, cytarabine and melphalan; CR: complete response; TBI: total body irradiation.

		2-year OS	p	2-year PFS	p	2-year NRM	p	2-year RI	p
Age	<65 years	52% (32-73%)	0.50	39% (19-59%)	0.39	0% (0-0%)	0.09	61% (41-81%)	0.98
	≥65 years	31% (9-54%)		31% (9-54%)		12% (0-29%)		56% (32-81%)	
Sex	Male	50% (29-71%)	0.69	41% (20-61%)	0.67	9% (0-21%)	0.21	50% (29-71%)	0.33
	Female	35% (13-58%)		29% (8-51%)		0% (0-0%)		71% (49-92%)	
Year of auto-HCT	<2010	59% (35-82%)	0.19	46% (22-70%)	0.3	0% (0-0%)	0.21	54% (30-78%)	0.65
	≥2010	32% (12-51%)		27% (9-46%)		9% (0-21%)		63% (43-84%)	
Karnofsky score at auto-HCT	≤80	43% (6-80%)	0.86	43% (6-80%)	0.79	14% (0-40%)	0.07	43% (6-80%)	0.42
	90-100	46% (26-66%)		42% (22-61%)		0% (0-0%)		58% (39-78%)	
Interval between diagnosis and auto-HCT	<12 months	42% (22-61%)	0.36	38% (18-57%)	0.63	8% (0-19%)	0.26	54% (34-74%)	0.99
	≥12 months	47% (21-72%)		33% (10-57%)		0% (0-0%)		67% (43-90%)	
Number of previous lines of therapy	1	50% (28-72%)	0.96	50% (28-72%)	0.45	0% (0-0%)	*	50% (28-72%)	0.45
	2-3	40% (0-83%)		20% (0-55%)		0% (0-0%)		80% (45-100%)	
Status of T-PLL at auto-HCT	CR	46% (27-65%)	0.56	38% (20-57%)	0.31	4% (0-11%)	0.60	58% (39-77%)	0.53
	Other	38% (12-65%)		31% (6-56%)		8% (0-22%)		62% (35-88%)	
Conditioning	BEAM	38% (17-59%)	0.75	38% (17-59%)	0.91	5% (0-14%)	0.90	57% (36-78%)	0.97
	Other	50% (27-73%)		33% (12-55%)		6% (0-16%)		61% (39-84%)	
TBI in conditioning	yes	75% (33-100%)	0.88	50% (1-99%)	0.86	0% (0-0%)	0.73	50% (1-99%)	0.96
	no	41% (25-58%)		35% (19-51%)		3% (0-9%)		62% (46-78%)	

*: no NRM observed in the group of patients with data on the number of previous therapy lines available.

Supplementary Table S2 Allo-HCT (second transplant) after auto-HCT

	Timing of relapse after auto-HCT (months)	Timing of allo-HCT after auto-HCT (months)	Timing (months) of last follow (status at last follow-up; cause of death)
After relapse after auto-HCT (n=2)			
	0.8	2.7	4.7 (dead; relapse)
	37	41.5	45.7 (dead; relapse)
Without recorded relapse after auto HCT (n=5)			
	/	2.8	5.8 (dead; GvHD)
	/	3.0	87.7 (alive)
	/	11.2	51.5 (alive)
	/	15.9	18.2 (dead; 2 nd malignancy)
	/	27.4	42.3 (alive)

Supplementary Table S3 Efficacy of allo-HCT for T-PLL in published reports (ALWP JS - Adult Lymphoma Working Group of the Japan Society, IQR – interquartile range, NR – not reported, OS – overall survival, PLL – prolymphocytic leukemia, PFS – progression-free survival, SFGM-TC - French society for stem cell transplantation, T-PLL – T-cell PLL, yr – year)

Reference	Type of HCT	Number of patients	Median follow-up (IQR), months	Median OS (95% CI), months	OS (95% CI) at time point X	Median PFS (95% CI), months	PFS (95% CI) at time point X
Current study	Auto	40	87.7 (IQR, 42 -90)	18.9 (95% CI 15.1-45.7)	4-yr 34% (19-50%)	14.9 (95% CI 8.5-30.9)	4-yr 29% (14-44%)
EBMT, Wiktor-Jedrzejczak, 2019 (1)	Allo	37	50 (range, 12-78)	27.8 (NR)	4-yr 42% (25–59%)	19.2 (11.6–46.7)	4-yr 30% (14–46%)
EBMT, Wiktor-Jedrzejczak, 2012 (2)	Allo	41	36 (18-72)	12 (NR)	3-yr 21% (7-34%)	10 (NR)	3-yr 19% (6-31%)
CIBMTR, Murthy, 2022 (3)	Allo	266	49 (range, 3-117)	NR	4-yr 30% (24- 36.5%)	NR	4-yr DFS 26% (20-32%)
CIBMTR, Kalaycio, 2010 (4)	Allo	21 among 47 PLL patients reported	NR	NR	NR	5.1 (NR)	NR
SFGM-TC, Guillaume, 2015 (5)	Allo	27	33 (range, 6-103)	26 (NR)	3-yr 36% (17-54%)	16.5 (NR)	3-yr 26% (14-45%)
Moffitt Cancer Center, Dholaria, 2018 (6)	Allo	11	48 (range, 6-123)	56 (95% CI 15–56)	4-yr 56% (24-89%)	15 (95% CI 12–99)	4-yr 45% (13-78%)
ALWP JS, Yamasaki, 2019 (7)	Allo	20	51 (range, 12-68)	NR	1-yr 58% (33–76%) 3-yr 40% (18–61%)	NR	1-yr 53% (29–72%) 3-yr 53% (29–72%)
Heidelberg Sellner, 2017 (8)	Allo	10	NR	NR	3-yr 50% (19-81%)	NR	3-yr 40% (10-70%)

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