

**S1 Table.** Characteristics of patients who received CAR-T for the second time

Sex	Age (yr)		Cyto/mol abn	Disease status		CAR-T origins		CRS (grade)		ICANS (grade)		MRD-CR after CAR-T		HSCT after CAR-T		Outcome
	C <sub>1</sub>	C <sub>2</sub>		C <sub>1</sub>	C <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	C <sub>1</sub>	C <sub>2</sub>	
M	4	5	<i>TCF3::PBX1</i>	R/R	R/R	Patient	Donor	0	3	0	1	Yes	Yes	Yes	No	CCR
M	4	4	-	MRD	MRD	Patient	Donor	0	3	0	0	Yes	Yes	Yes	No	BM relapse, death
F	7	9	-	R/R	R/R	Patient	Donor	2	3	0	1	Yes	Yes	Yes	No	CCR
M	14	15	-	MRD	MRD	Patient	Donor	1	2	0	0	Yes	Yes	Yes	Yes	CCR
F	15	16	<i>IKZF1</i>	R/R	MRD	Patient	Patient	2	3	0	0	Yes	Yes	No	No	CCR
F	8	9	<i>TCF3::PBX1</i>	MRD	MRD	Patient	Donor	0	1	0	0	Yes	Yes	Yes	Yes	Death of TRM

BM, bone marrow; CAR-T, chimeric antigen receptor-T lymphocytes; CCR, continuous complete remission; CR, complete remission; CRS, cytokine release syndrome; HSCT, hematopoietic stem cell transplantation; ICANS, immune effector cell-associated neurotoxicity syndrome; MRD, minimal residual disease; R/R, refractory/relapse; TRM, transplantation related mortality.