

Treatment outcomes of pediatric acute myeloid leukemia: A retrospective analysis from 1996 to 2019 in Taiwan

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Induction

Idarubicin ($9 \text{ mg/m}^2/\text{day} \times 3$) and Cytarabine ($100 \text{ mg/m}^2/\text{day} \times 7$)

Idarubicin ($9 \text{ mg/m}^2/\text{day} \times 3$) and Cytarabine ($100 \text{ mg/m}^2/\text{day} \times 7$)

or

Mitoxantrone ($8 \text{ mg/m}^2/\text{day} \times 5$) and Etoposide ($100 \text{ mg/m}^2/\text{day} \times 5$) every 4 weeks if remission is not achieved with the above chemotherapy regimen

Consolidation

Cytarabine ($1 \text{ g/m}^2/12 \text{ h}$ on days 1–4) and Etoposide ($100 \text{ mg/m}^2/\text{day} \times 5$)

Cytarabine ($1 \text{ g/m}^2/12 \text{ h}$ on days 1–4) and Mitoxantrone ($10 \text{ mg/m}^2/\text{day}$ on days 2–5)

Cytarabine ($1 \text{ g/m}^2/12 \text{ h}$ on days 1–4) and Etoposide ($100 \text{ mg/m}^2/\text{day} \times 5$)

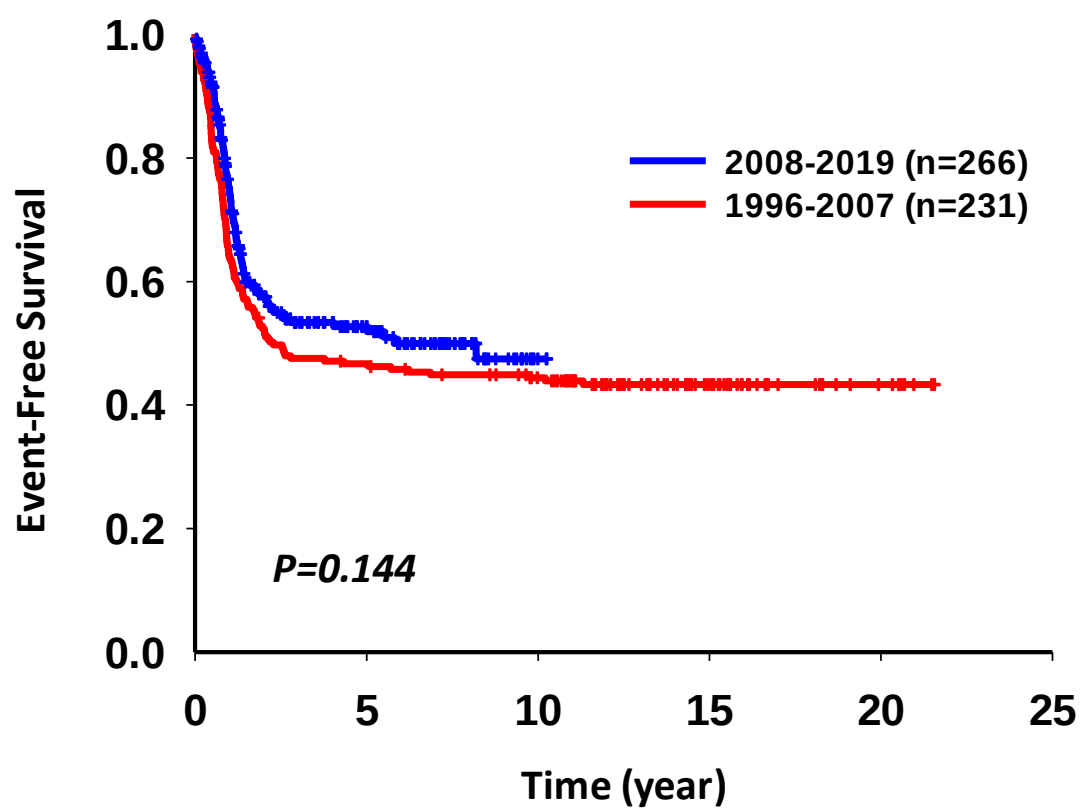
Cytarabine ($1 \text{ g/m}^2/12 \text{ h}$ on days 1–4) and Mitoxantrone ($10 \text{ mg/m}^2/\text{day}$ on days 2–5)

Post-remission 4 cycles

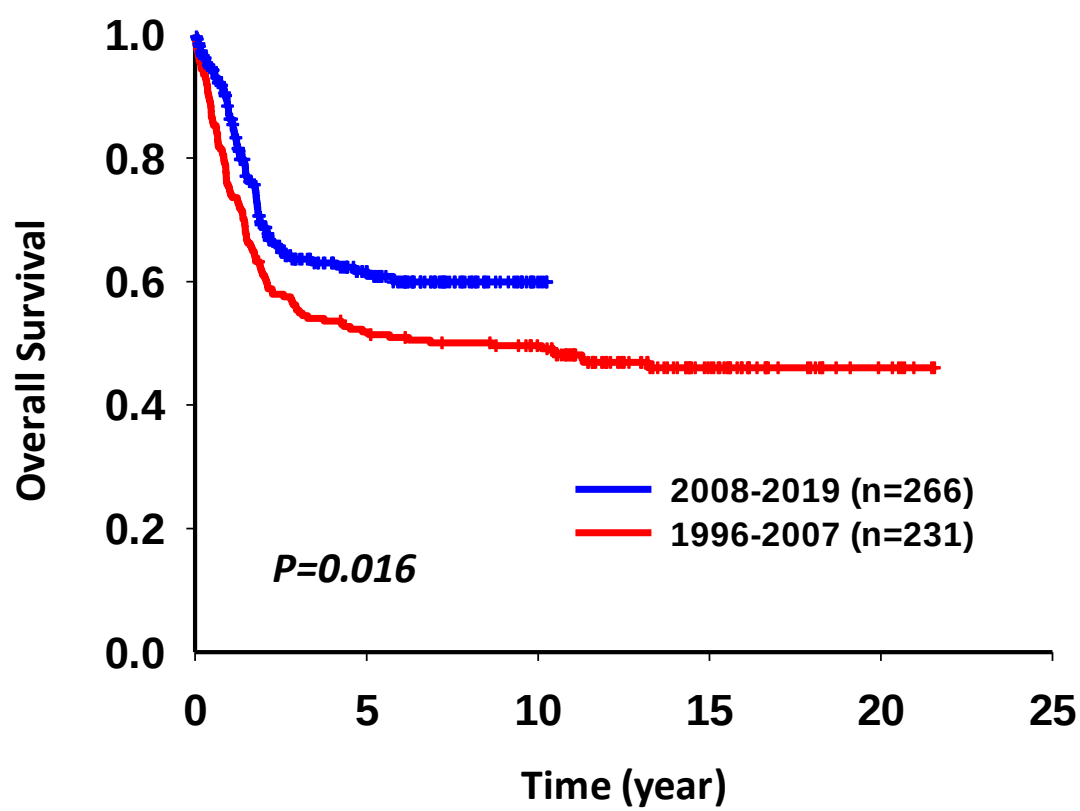
Idarubicin ($9 \text{ mg/m}^2/\text{day} \times 1$) and Cytarabine ($200 \text{ mg/m}^2/\text{day} \times 5$) followed

Supplementary Figure 1. Summary of TPOG-AML-97A chemotherapy

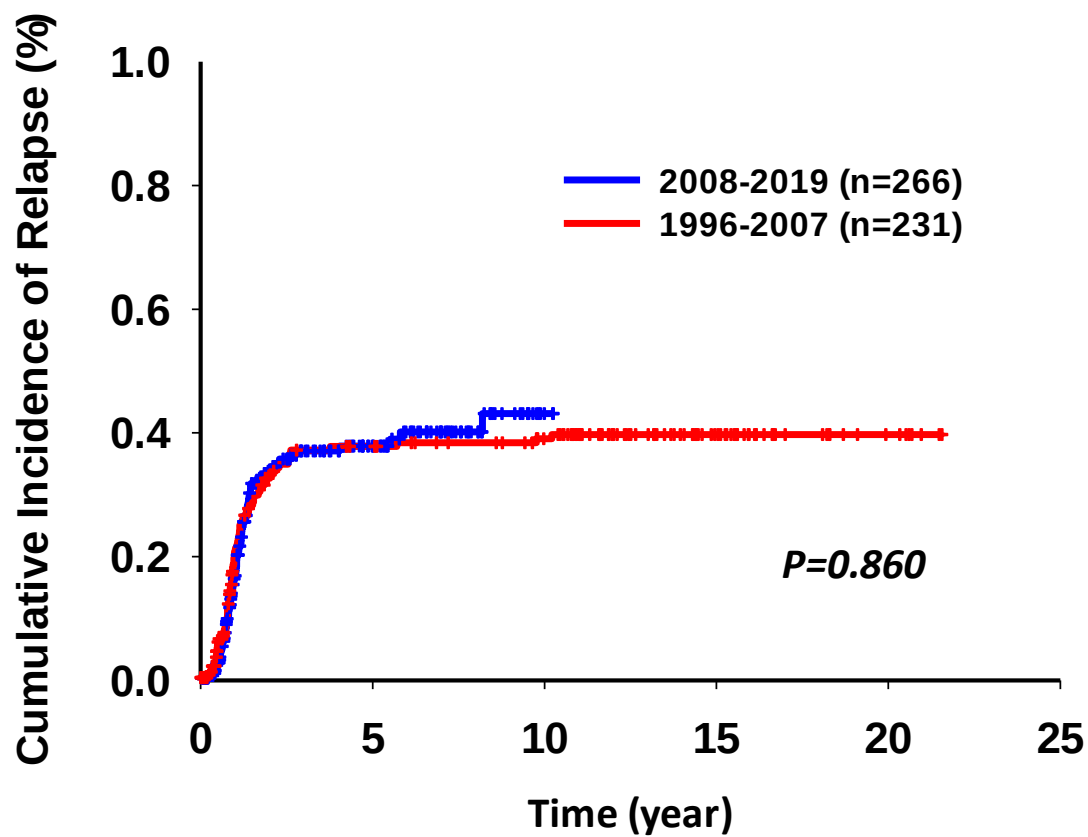
(a)



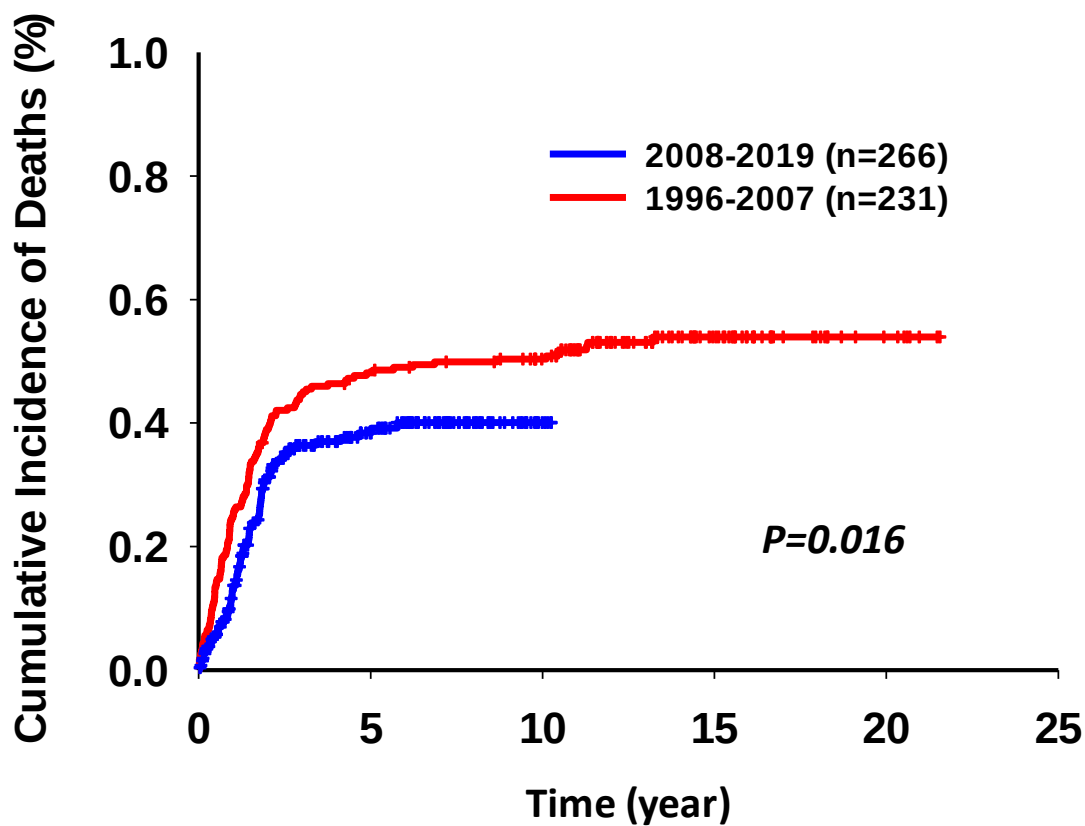
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(c)

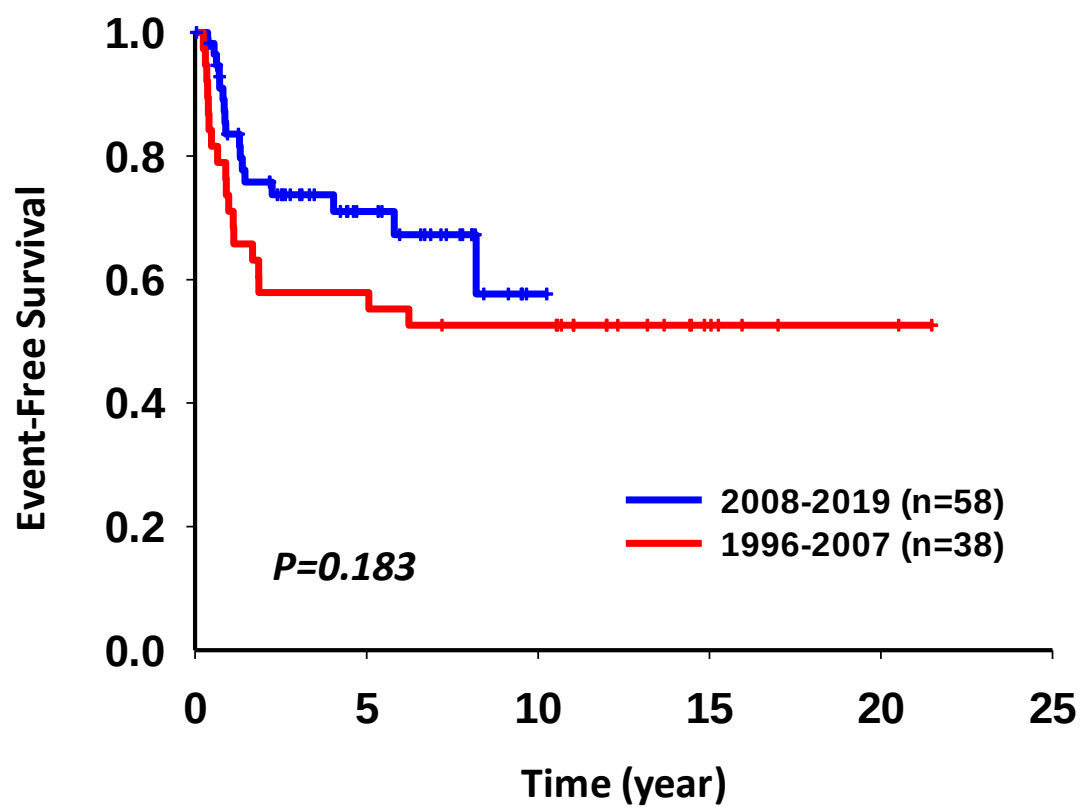


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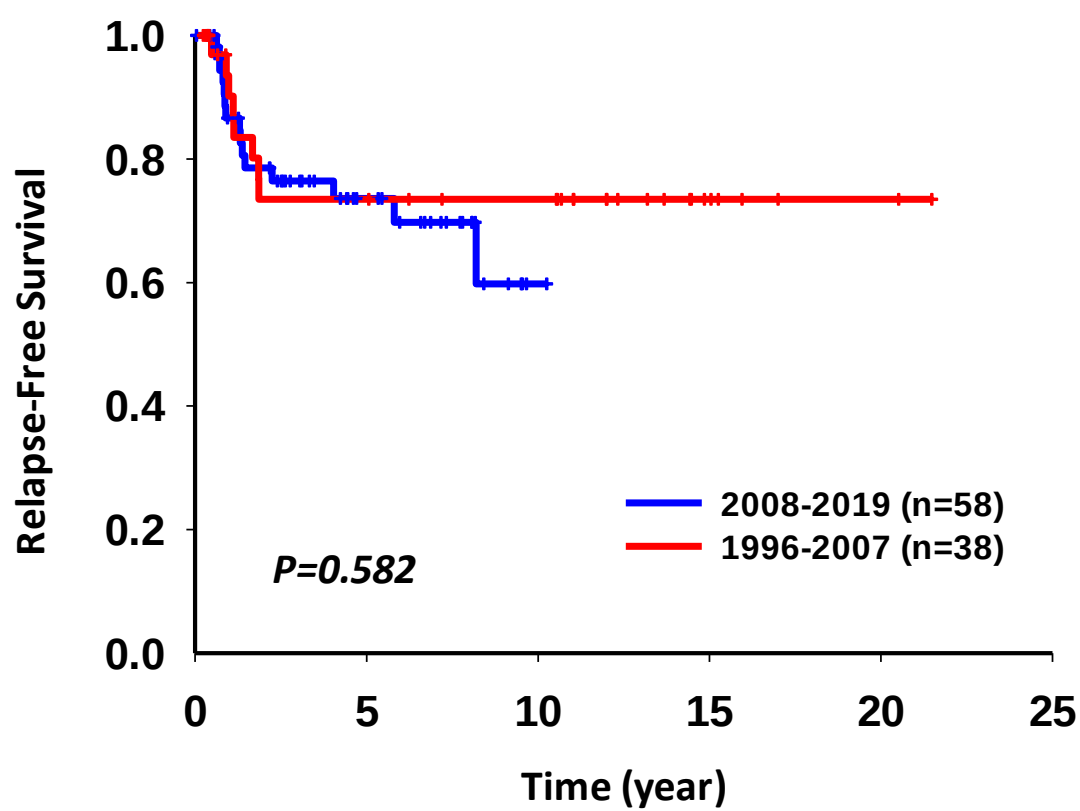


Supplementary Figure 2. Five-year (a) event-free survival, (b) overall survival, (c) cumulative relapsed rates, and (d) non-relapse overall survival of patients who received the TPOG-AML-97A treatment protocol during 1996–2007 and 2008–2019.

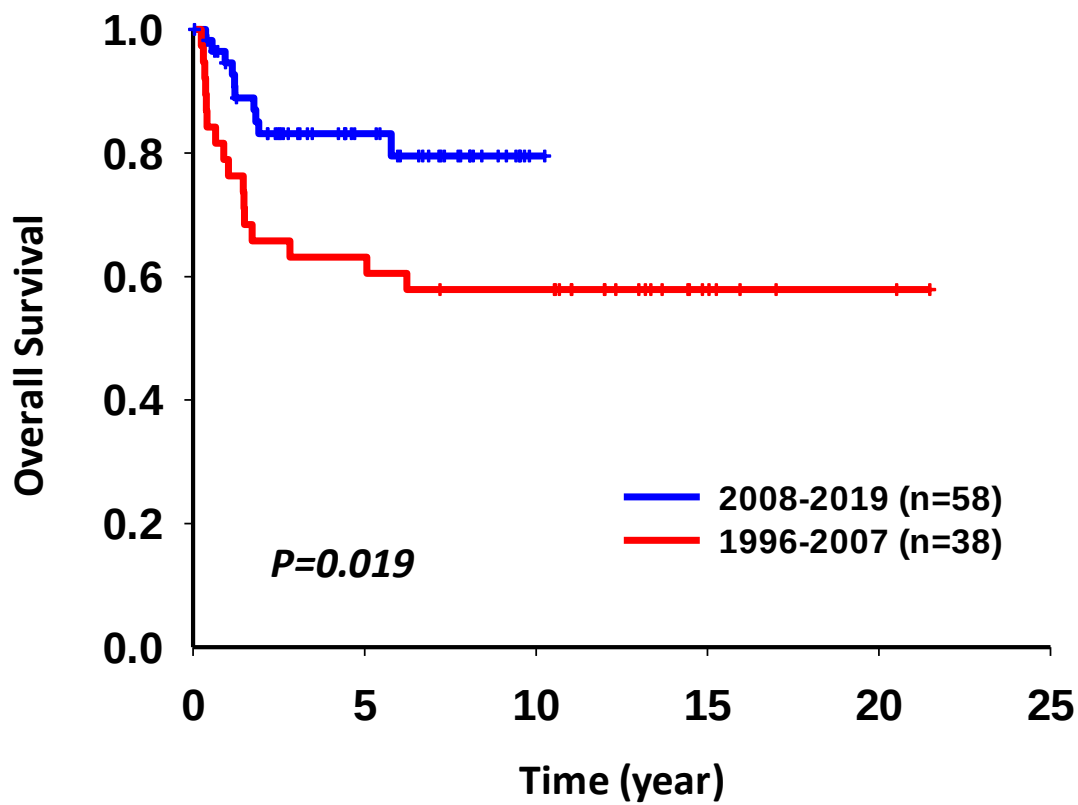
(a)



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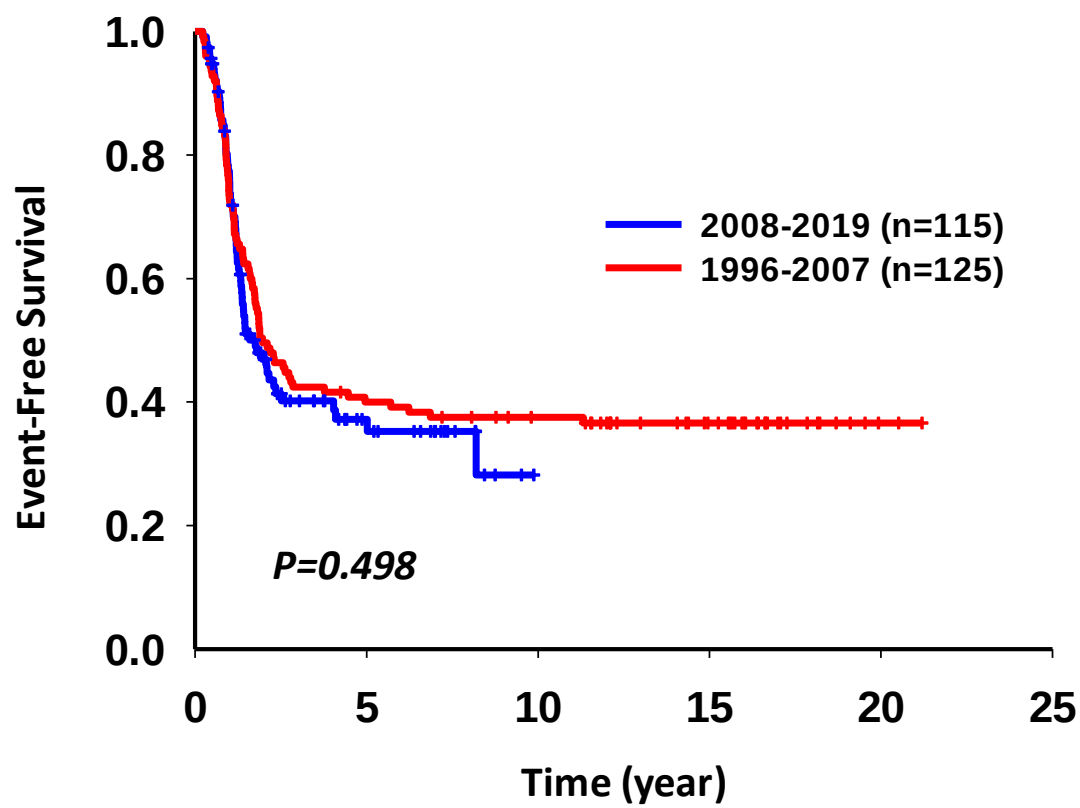


(c)

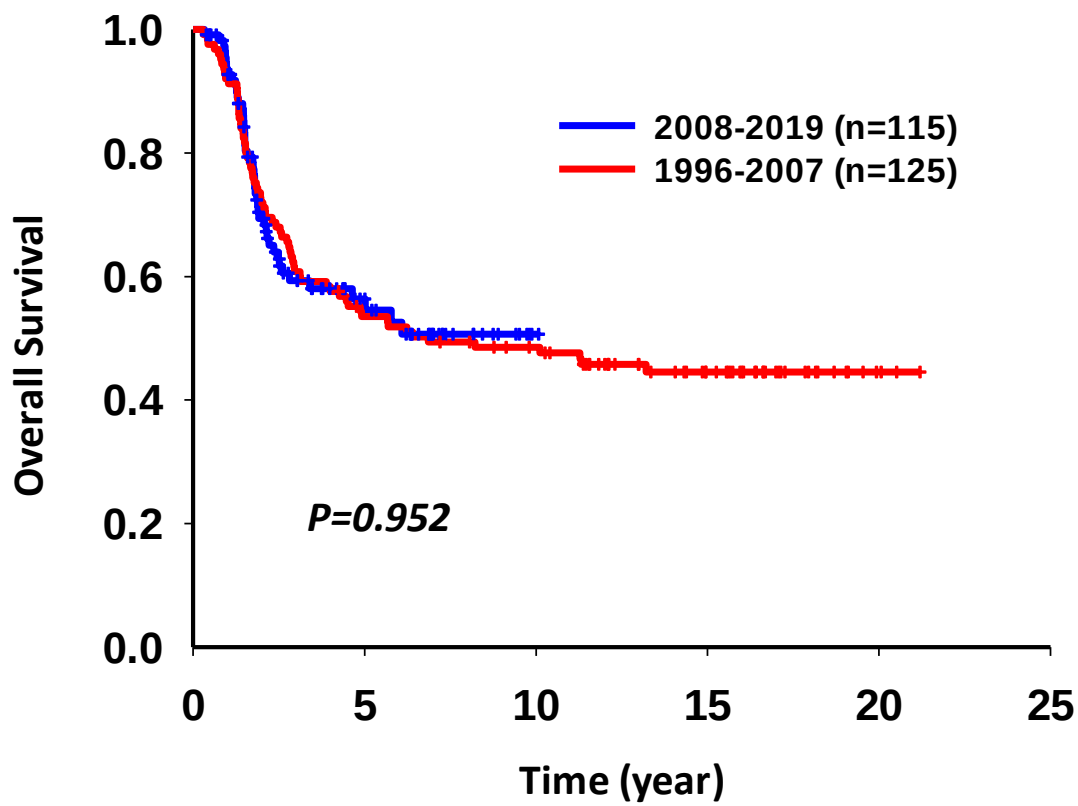


Supplementary Figure 3. 5-year (a) event-free survival, (b) relapse-free survival, and (c) overall survival rates of patients with *RUNX1–RUNX1T1*.

(a)

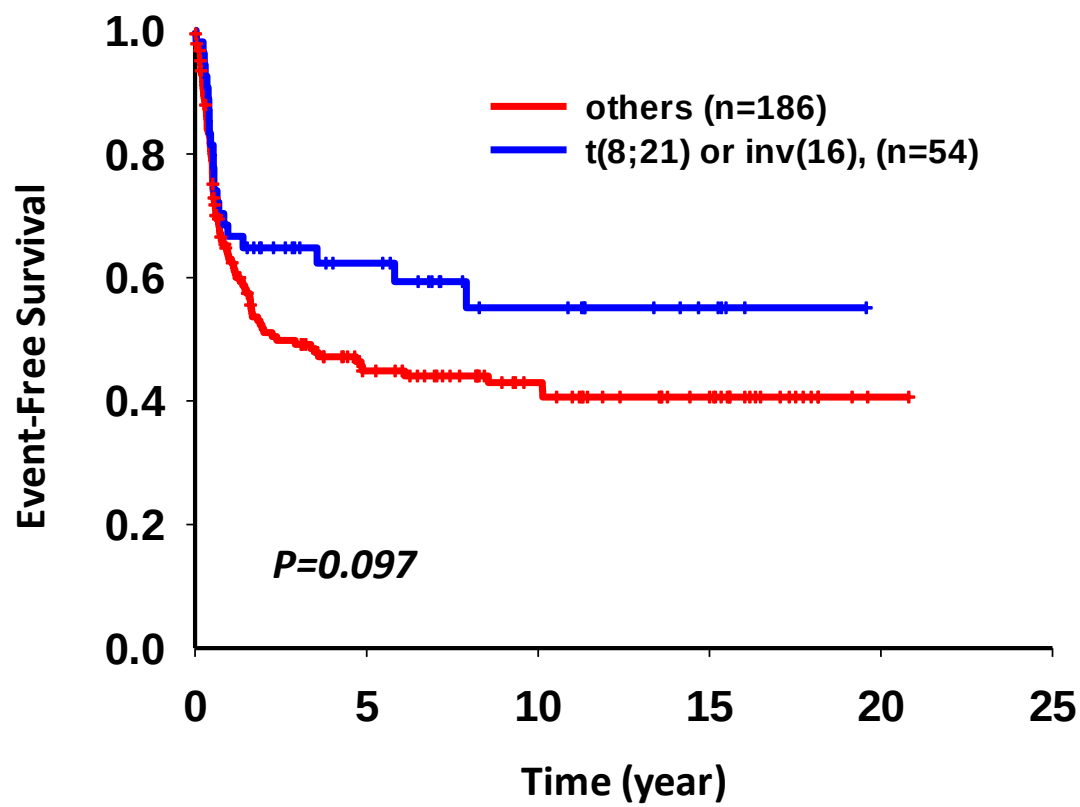


(b)

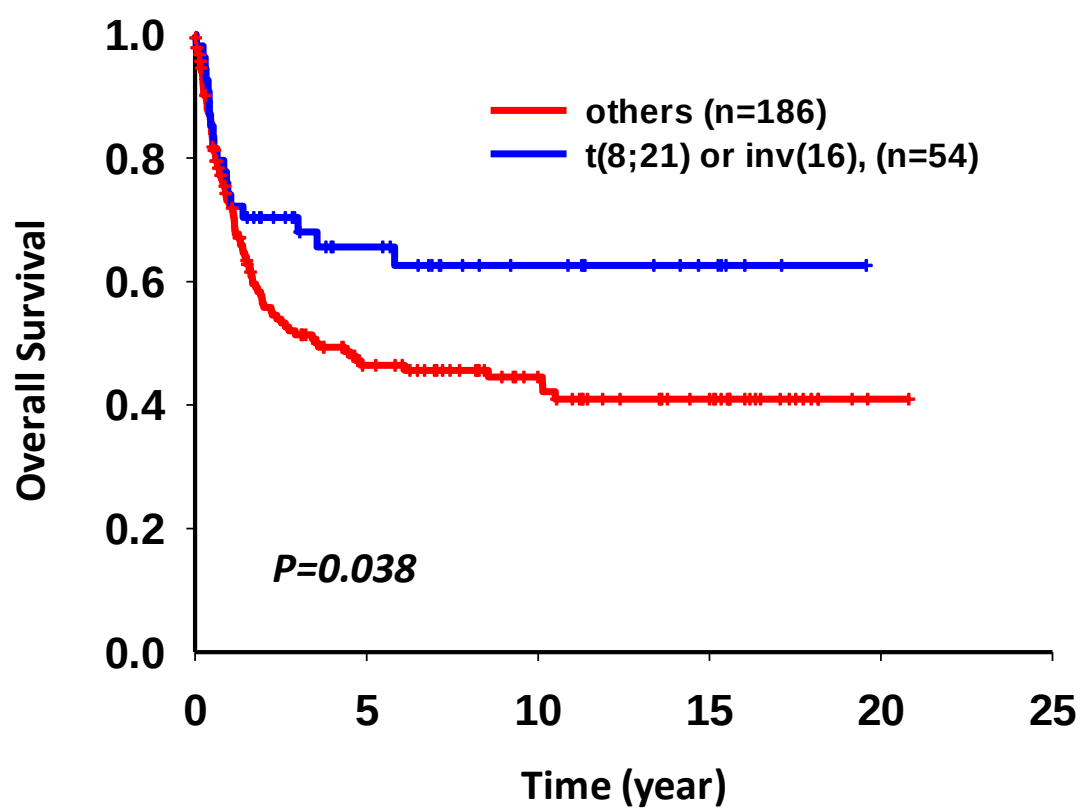


Supplementary Figure 4. Non-significant differences between the 5-year (a) event-free survival and (b) overall survival rates between the two periods

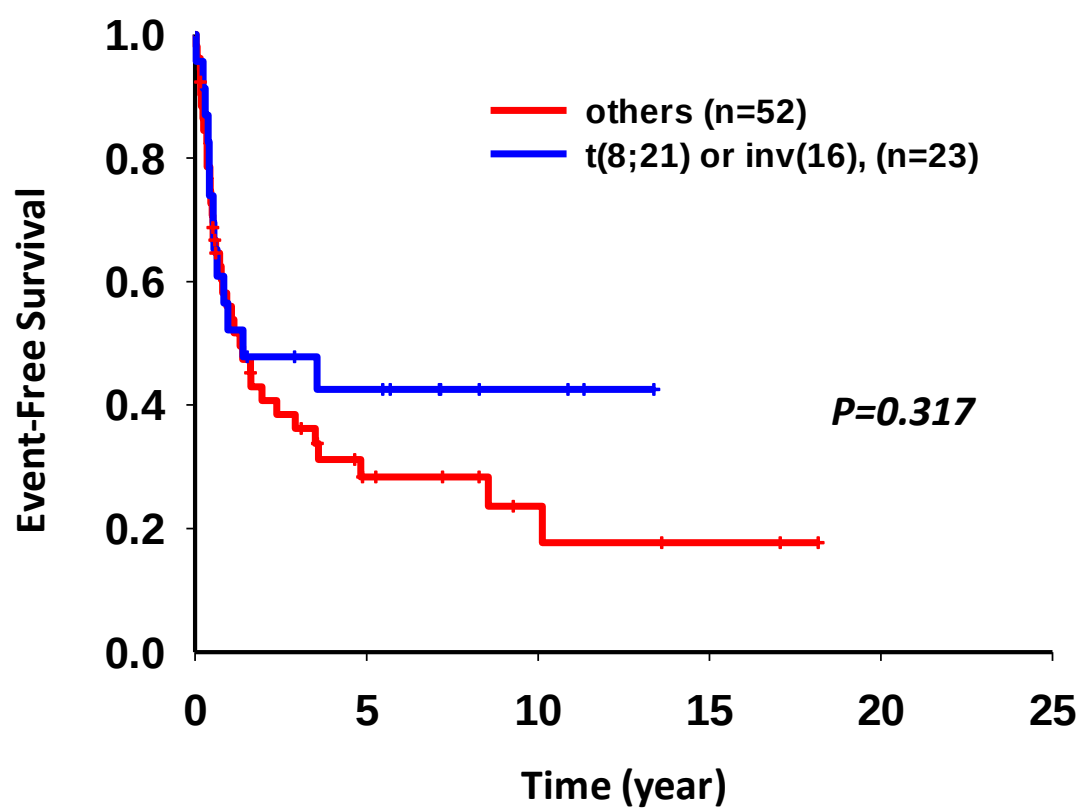
(a)



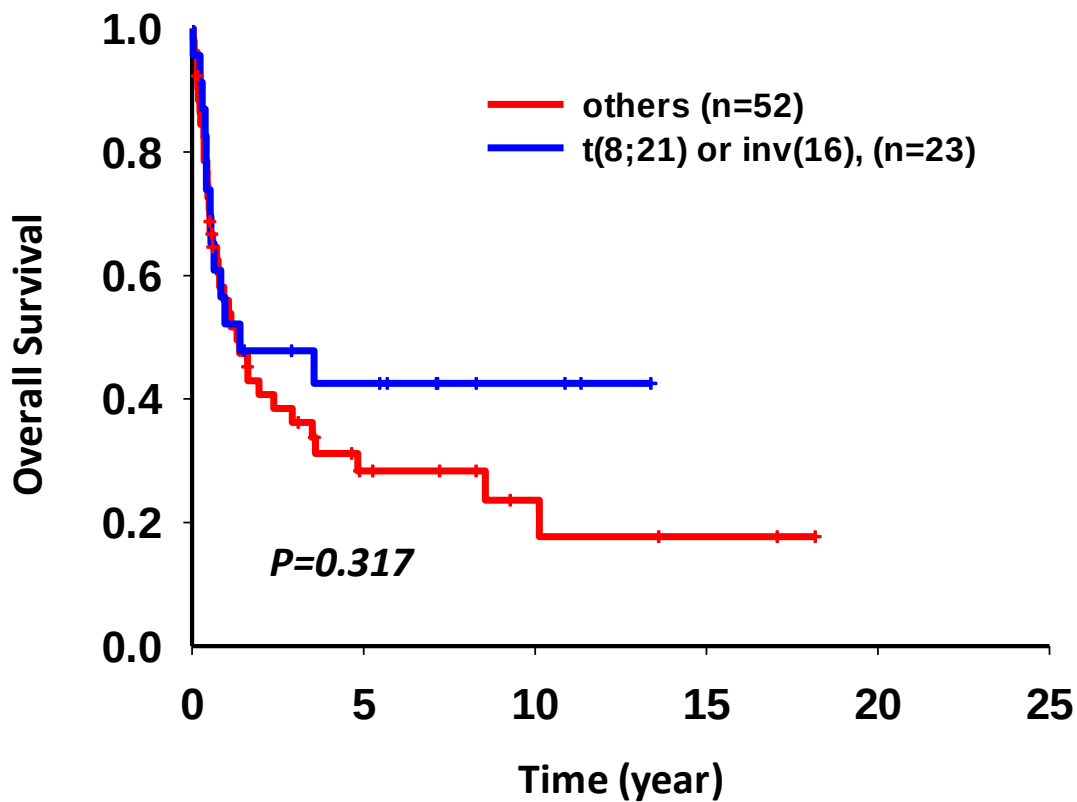
(b)



(c)



(d)



Supplementary Figure 5. (a)(b) Patients with *RUNX1–RUNX1T1* or *CBFB–MYH11* have better outcomes after bone marrow transplantations. (c)(d) For patients with relapse followed by bone marrow transplantations, the trend is the same.

Supplementary Table 1. Baseline characteristics of patients in CR1 who received HSCTs

	1996–2007 (n=90)		2008–2019 (n=75)		Total (n=165)		
	n	%	n	%	n	%	p
Gender							0.057
Male	46	51.11	50	66.67	96	58.18	
Female	44	48.89	25	33.33	69	41.82	
Age							0.991
Median, range	11.59	0.01-17.99	12.10	0.09-17.75	11.88	0.01-17.99	
WBC							0.988
Median, range	24.55	0.7-549.30	23.18	0.80-435.60	23.60	0.7-549.30	
FAB							0.553
M0	5	5.56	6	8	11	6.67	
M1	13	14.44	11	14.67	24	14.55	
M2	35	38.89	25	33.33	60	36.36	
M4	12	13.33	10	13.33	22	13.33	
M5	8	8.89	11	14.67	19	11.52	
M6	3	3.33	1	1.33	4	2.42	
M7	7	7.78	6	8	13	7.88	
M9	3	3.33	5	6.67	8	4.85	
Unknown	4	4.44	0	0	4	2.42	
Chromosome							0.025
-5/del(5q)/-7/ del(7q)	2	2.22	2	2.67	4	2.42	
11q23	1	1.11	4	5.33	5	3.03	
Complex	6	6.67	7	9.33	13	7.88	
N/A	15	16.67	2	2.67	17	10.3	
Normal	34	37.78	20	26.67	54	32.73	
Other	11	12.22	18	24	29	17.58	
inv(16)	1	1.11	0	0	1	0.61	
t(6;9)	1	1.11	0	0	1	0.61	
t(8;21)	15	16.67	15	20	30	18.18	
t(9;11)	3	3.33	7	9.33	10	6.06	
t(9;22)	1	1.11	0	0	1	0.61	

Abbreviations: FAB: French–American–British, WBC: white blood cell, CR: complete remission