Presentation and management of pediatric T-cell acute lymphoblastic leukemia with mediastinal mass and hyperleukocytosis

Authors

Bradley Muller,[1] Yin Su,[2] Alaina Rule,[1] Zhongbo Hu,[1] Ashley C. Holland,[1,3] John K. Choi,[4,5] Jeffrey M. Klco,[4] Jun J. Yang,[6] Charles G. Mullighan,[4] Seth E. Karol,[1,7] Cheng Cheng,[2] Li Tang,[2] Sima Jeha,[1,7] Ching-Hon Pui[1,7] and Hiroto Inaba[1,7]

[1]Department of Oncology, St. Jude Children's Research Hospital, Memphis, TN; [2]Department of Biostatistics, St. Jude Children's Research Hospital, Memphis, TN; [3]Center of Advanced Practice, St. Jude Children's Research Hospital, Memphis, TN; [4]Department of Pathology, St. Jude Children's Research Hospital, Memphis, TN; [5]Department of Laboratory Medicine, University of Alabama at Birmingham, Birmingham, AL; [6]Department of Pharmacy and Pharmaceutical Sciences, St. Jude Children's Research Hospital, Memphis, TN and [7]Department of Pediatrics, University of Tennessee Health Science Center, Memphis, TN, USA

Correspondence:
H. INABA - hiroto.inaba@stjude.org
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Supplemental Table 1. Cumulative incidence of isolated CNS relapse based on clinical characteristics

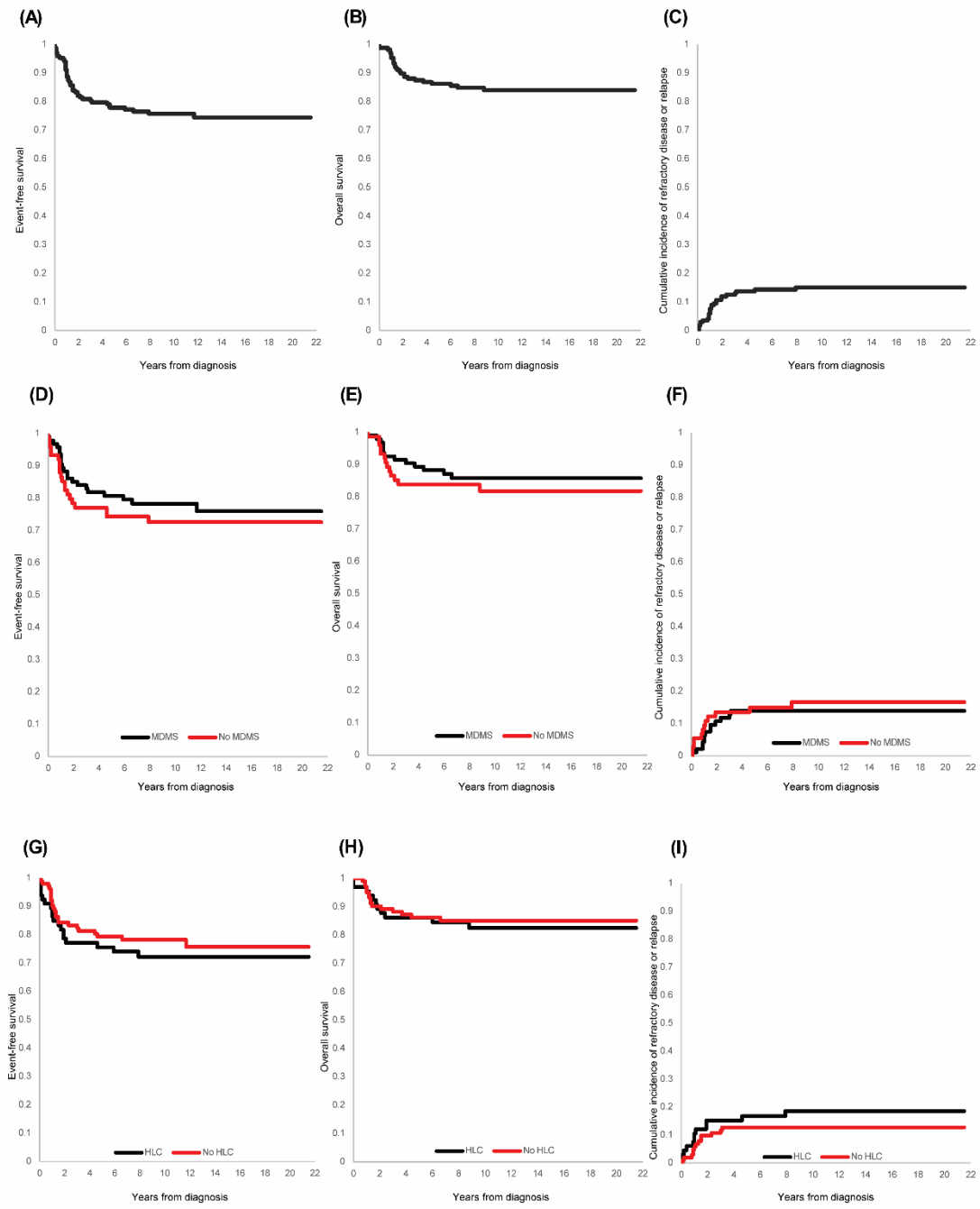
	N (%)	5-year-CIR	10-year-CIR	*P*
All patients				
	168	5.4% (95% CI: 2.6-9.6%)	5.4% (95% CI: 2.6-9.6%)	NA
Mediastinal mass				
Yes	94 (56)	6.4% (95% CI: 2.6-12.6%)	6.4% (95% CI: 2.6-12.6%)	0.500
No	74 (44)	4.1% (95% CI: 1.1-10.5%)	4.1% (95% CI: 1.1-10.5%)	
Leukocyte count at diagnosis				
$<100x10^9/L$	102 (61)	2.9% (95% CI: 0.8-7.7%)	2.9% (95% CI: 0.8-7.7%)	0.08
$\geq100x10^9/L$	66 (39)	9.1% (95% CI: 3.7-17.7%)	9.1% (95% CI: 3.7-17.7%)	
CNS leukemia at diagnosis				
No	84 (50)	1.2% (95% CI: 0.1-5.8%)	1.2% (95% CI: 0.1-5.8%)	**0.016**
Yes (CNS 2 and 3 and traumatic tap with blasts)	84 (50)	9.6% (95% CI: 4.5-17.1%)	9.6% (95% CI: 4.5-17.1%)	
CNS status at diagnosis				
CNS-1	84 (50)	1.2% (95% CI: 0.1-5.8%)	1.2% (95% CI: 0.1-5.8%)	0.098
CNS-2	57 (34)	10.7% (95% CI: 4.3-20.4%)	10.7% (95% CI: 4.3-20.4%)	
CNS-3	11 (7)	9.1% (95% CI: 0.4-35%)	9.1% (95% CI: 0.4-35%)	
Traumatic with blasts	16 (9)	6.3% (95% CI: 0.4-25.5%)	6.3% (95% CI: 0.4-25.5%)	

Abbreviations: CNS, central nervous system; CIR, cumulative incidence of relapse; CI, confidence interval; NA, not applicable

Supplemental Table 2. Adverse events within 14 days from diagnosis in patients with T-ALL based on clinical characteristics

Adverse effects	All patients	Mediastinal Mass			Hyperleukocytosis		
	Total No. of patients (%) n=168	No. of patients with mediastinal mass (%), n=94	No. of patients without mediastinal mass (%), n=74	*P*	No. of patients with hyperleukocytosis (%), n=66	No. of patients without hyperleukocytosis (%), n=102	*P*
Neurologic, n (%)	8 (8)	2 (4)	6 (11)	0.071	3 (6)	5 (9)	0.685
Pulmonary, n (%)	10 (9)	9 (18)	1 (2)		5 (10)	5 (9)	
Gastrointestinal/hepatic, n (%)	10 (9)	3 (6)	7 (13)		5 (10)	5 (9)	
Hemorrhagic/hematologic, n (%)	1 (1)	1 (2)	0		1 (2)	0	
Cardiovascular, n (%)	14 (13)	7 (14)	7 (13)		7 (14)	7 (13)	
Infection, n (%)	40 (38)	17 (33)	23 (42)		16 (31)	24 (44)	
Metabolic, n (%)	21 (20)	11 (22)	10 (18)		12 (24)	9 (16)	
Early death, n (%)	2 (2)	1 (2)	1 (2)		2 (4)	0	

Supplemental Figure 1.



Panels A-C show the event-free survival (EFS), overall survival (OS) and cumulative incidence of relapse or refractory disease (CIR) for all patients with T-cell acute lymphoblastic leukemia treated on St. Jude Total Therapy Studies XV and XVI. Panels D-F display the EFS, OS, and CIR stratified by the presence (black line) or absence (red line) of a mediastinal mass (MDMS). Panels G-I show the EFS, OS, and CIR stratified by the presence (black line) or absence (red line) of hyperleukocytosis (HLC).