

Supplemental Table 1: PDT-ALL-LBL Treatment Protocol**Supplemental Table 2: CDKN2 Association with Other FISH Abnormalities****Supplemental Table 3: Univariate and Multivariate Analysis of CDKN2 Patients' OS, DFS, and Relapse****Supplemental Table 1. PDT-ALL-LBL Treatment Protocol**

Element	Drug	Dose	Given Day(s)
VICLD	Vincristine/VCR	1.4 mg/m ²	day 1, 8, 15, 22
	Idarubicin/IDA	10 mg/m ²	day 1, 8
	Cyclophosphamide/CTX	1 g/m ²	day 1
	Pegaspargase/PEG-asparaginase	2000IU/m ²	day 1,15
	Dexamethasone	0.15mg/m ²	day 1 - 24
	Chidamide	10 mg	day 1 - 24

Bone marrow test and Flow-based MRD-assessment were performed on d15, d24 and d45 during induction phase.

Supplemental Table 2. CDKN2 Association with Other FISH Abnormalities

	CDKN2 DEL (n=57)	CDKN2 WT(n=184)	<i>P</i>
TEL/AML1	5(8.8%)	6(3.3%)	0.388
MLL rearrangement	7(12.3%)	3(1.6%)	0.000
MYC translocation	10(17.5%)	6(3.3%)	0.000
IGH rearrangement	6(10.5%)	10(5.4%)	0.177
Hyperdiploidy	3(5.3%)	2(1.1%)	0.161
E2A/PBX1	9(15.8%)	11(6%)	0.019
BCR/ABL	1(1.8%)	0(0%)	0.534

Supplemental Table 3 Univariate and Multivariate Analysis of CDKN2 Patients' OS, DFS, and Relaps

	OS		DFS		Relapse	
	Univariate P value	Multivariate P value (HR 95%CI)	Univariate P value	Multivariate P value (HR 95%CI)	Univariate P value	Multivariate P value (HR 95%CI)
female/Male	0.98		0.457		0.115	
Age(≥ 35 / < 35 y)	0.393		0.26		0.746	
WBC $\geq 100 \times 10^9/L$ / < 100	0.904		0.963		0.412	
ETP/non-ETP	0.452		0.44		0.909	
HSCT/non-HSCT	< 0.001	0.003 (0.32,0.15-0.68)	< 0.001	0.002 (0.26,0.11-0.62)	0.005	0.024(0.25,0.08-0.83)
Pediatric/adult-chemo	0.975		0.266		0.228	
Risk(high/ Standard)	0.761		0.82		0.721	
MRD1+/MRD1-	0.008	0.024 (2.37,1.12-5.02)	0.006	0.041 (2.24,1.03-4.85)	0.008	0.022(3.92,1.22-12.54)
Karyotype(Complex/Normal)	0.146		0.307		0.044	0.095(3.29,0.81-13.3)
Others/normal	0.704		0.898			0.59(1.59,0.29-8.89)