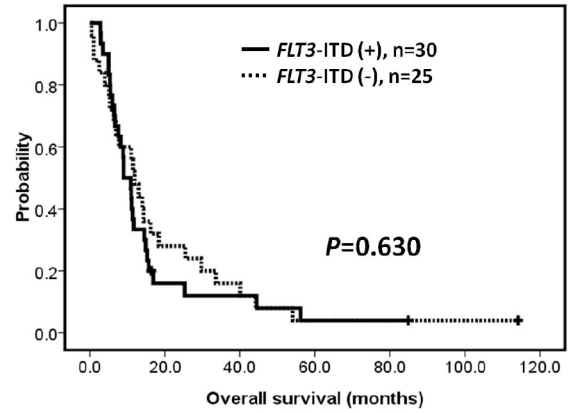
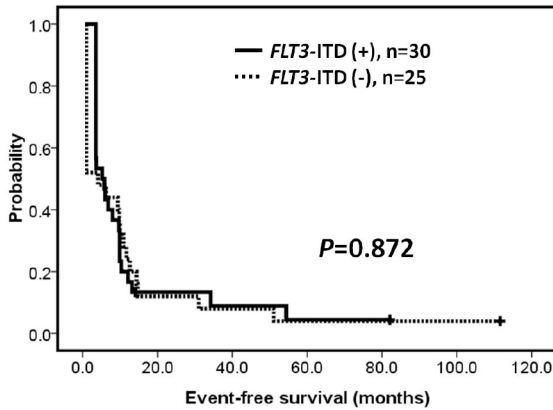
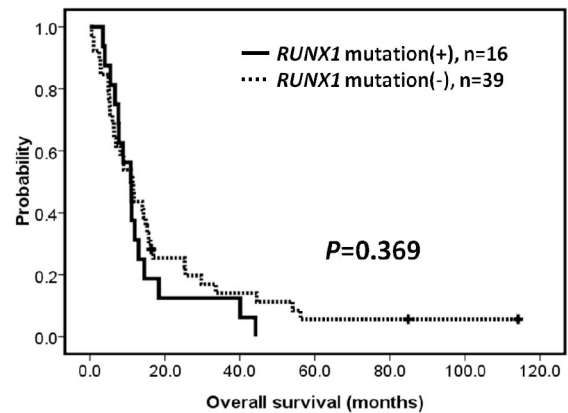
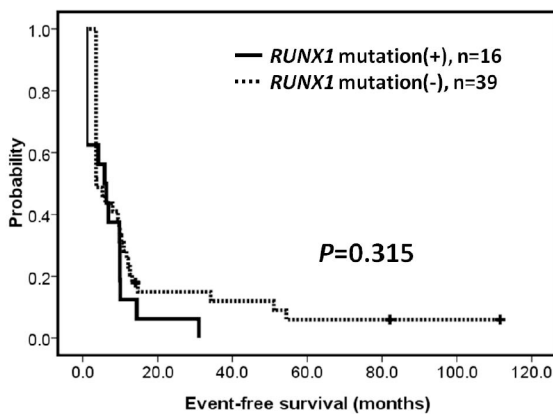


SUPPLEMENTARY FIGURE AND TABLES

(A)

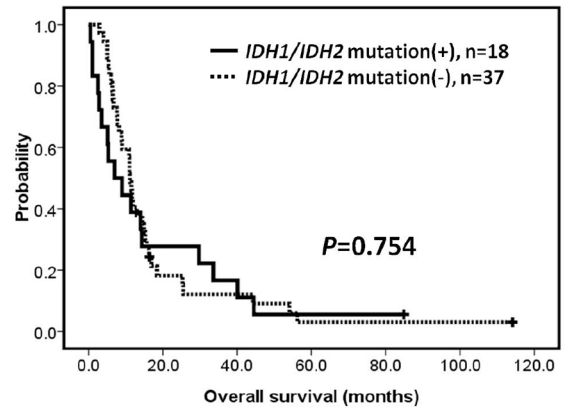
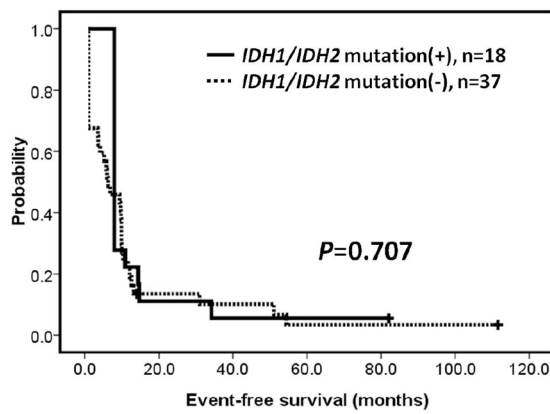


(B)

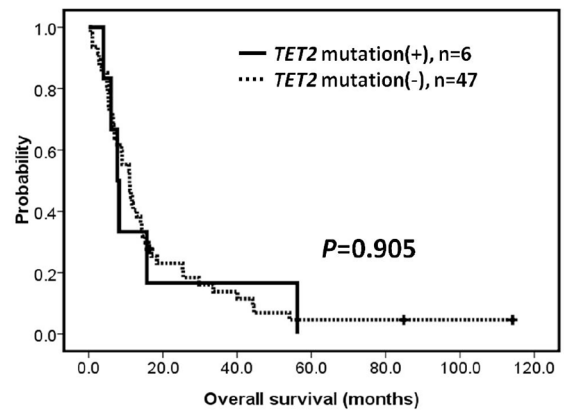
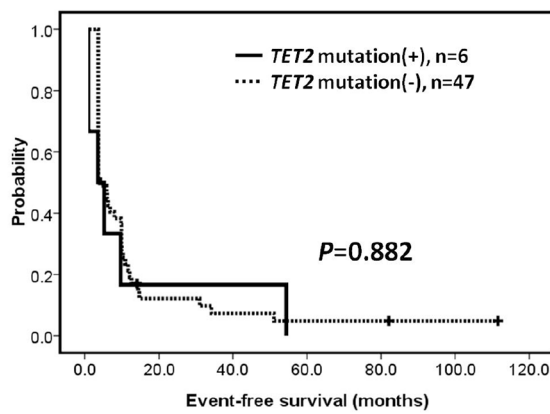


Supplementary Figure S1: Survivals of patients with *MLL*-PTD AML. Kaplan-Meier estimate of event-free survival (left panel) and overall survival (right panel) in *MLL*-PTD AML patients according to the mutation status of **A. *FLT3*-ITD**, **B. *RUNX1***. (Continued)

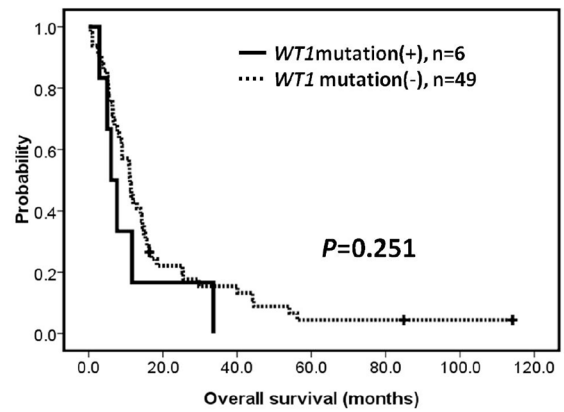
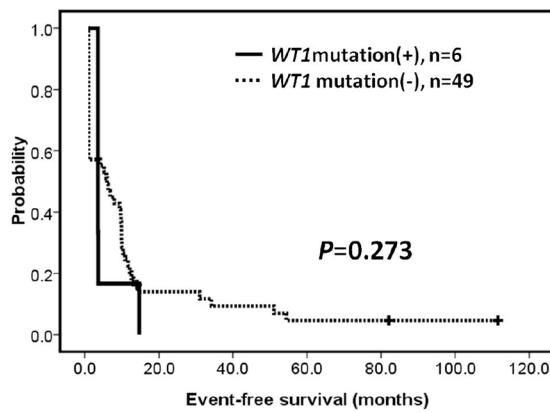
(C)



(D)



(E)



Supplementary Figure S1: (Continued) Survivals of patients with MLL-PTD AML. C. IDH1/IDH2, D. TET2 and E. WT1.

Detection of *MLL*-PTDSupplementary Table S1: Primer sequences for the screen of *MLL*-PTD and *ABL1* genes by RT-PCR

Size of PCR product	Primers	Primer sequences (5' → 3')
<i>MLL</i> -PTD PCR (655 bp)	MLLe (forward primer)	CCTGAATCCAAACAGGCCACCACT
	MLL3.1c (reverse primer)	AGGAGAGAGTTTACCTGCTC
PCR internal control (201 bp)	ABL-5F (forward primer)	TTCAGCGGCCAGTAGCATCTGACTT
	ABL-3R (reverse primer)	TGTGATTATAGCCTAAGACCCGGAG

MLL-PTD (e9e3) PCR product = 654 bp,

MLL-PTD (e11e3) PCR product = 900 bp

ABL1 PCR product = 201 bp

Supplementary Table S2: Primer sequences for the detection of *MLL*-PTD and *ABL1* genes by real-time quantitative RT-PCR TaqMan assay

Primer/probe	position (size)	Sequence (5' → 3')
<i>MLL</i> -ex9-F	4036–4058 (23)	GTCCAGAGCAGAGCAAACAGAAA
<i>MLL</i> -ex11-F	4332–4351 (20)	TGTGCCAGTAGTGGGCATGT
<i>MLL</i> -ex2(3)-R	572–560 (23)	AATTTTCGGTCAGAGCCACTTCTA
<i>MLL</i> -PTD probe	494–520 (27)	CAGAGTGCGAAGTCCCACAAGGTCTCC
<i>ABL</i> -QF	589–617(29)	TGGAGATAACACTCTAAGCATAACTAAAGGT
<i>ABL</i> -QR	691–712 (21)	GATGTAGTTGCTTGGGACCCA
<i>ABL</i> probe	567–594 (28)	CCATTTTTGGTTTGGGCTTCACACCATT

Positions according to accession numbers D14540 (*MLL*) and M14752 (*ABL1*).

Reference values (NCN = *MLL*-PTD/*ABL1*)

MLL-PTD(e9e3) Normal range ($N = 30$): 0.00008~0.0012

MLL-PTD(e11e3) Normal range ($N = 30$): 0.00029~0.00073

The normal upper limit of NCN for e9e3 *MLL*-PTD is <0.0012

The normal upper limit of NCN for e11e3 *MLL*-PTD is <0.00073

Supplementary Table S3: Patient treatment and outcome according to age groups

Age groups	<18 years	18–59 years	>=60 years
Treatment			
Standard 3 + 7 chemotherapy	1	41	9
TPOG 2002 AML protocol	4	0	0
Low dose chemotherapy	0	0	2
Supportive care only	0	6	35
Complete remission rate	100% (5/5)	48.8% (20/41)	77.8% (7/9)
Allogeneic stem cell transplantation	1	7	0
Median OS (months)⁺	16.9 (5.3–28.5)	8.2 (3.5–12.8)	2.8 (0.2–5.4)
Median EFS (months)⁺	10.3 (8.4–12.2)	0	0

⁺ Values: Median with 95% confidence interval.

Supplementary Table S4: Clinical characteristics of *MLL*-PTD AML patients with *DNMT3A*, *TET2*, *IDH1/IDH2*, *FLT3*-ITD and *RUNX1* mutations.