

Pure erythroid leukemia is characterized by biallelic *TP53* inactivation and abnormal p53 expression patterns in *de novo* and secondary cases

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<https://doi.org/10.3324/haematol.2021.280487>

Supplementary Table 1. Cytogenetic and mutational profiles of pure erythroid leukemia

Case #	Conventional Karyotype	FISH*	Other Mutations (VAF)	Platform of Mutation Analysis
1	44,XY,der(3)add(3)(p13)del(3)(q21q25),-5,add(7)(q32),-16,-18,+mar[2]/59-66,XY,-X,del(1)(q21),add(3)(p13),-5,+6,-7,+8,+8,-9,-10,-12,-13,-14,+15,-17,-18,+19,+21,+22,+1~7mar[cp14]/46,XY[4]	N/D	None	81-gene panel
2	43~47,X,-Y,add(5)(q13),add(13)(p11.2),-15,-17,-18,add(19)(p13.3),+5~8mar[cp3]/46,XX[17]	<i>TP53</i> deletion and Monosomy 17	None	81-gene panel
3	38~49,X,add(X)(q28),+1,der(1)t(1;1)(q21;p13),del(2)(q31),del(4)(q31),-5,add(7)(q36),+11,-13,der(16)t(11;16)(q14;p13.1),der(17)t(5;17)(p14;p11.2),der(18)t(1;18)(q21.1;q23),add(19)(q13.4),del(20)(q11.2q13.1)[cp16]/46,XX[4]	<i>TP53</i> deletion and monosomy 17	<i>TET2</i> C1289Y (<3%)	81-gene panel
4	37~51,XY,-3,add(3)(p12),add(4)(q35),del(5)(q12),der(7)del(7)(p13p15)del(7)(q22q34),add(10)(q26),-13,-17,-19,-20,-21,-22,+1~6mar[cp4]/46,XY[7]	N/D	<i>NRAS</i> G13R (26.6%)	81-gene panel
5	44~50,XX,+1,del(6)(q13q23),-7,add(7)(p15),del(7)(p13),add(9)(p13),del(9)(p13),+14,-16,add(19)(p13.1),+2~4mar[cp18]/46,XX[2]	Negative for <i>TP53</i> gene deletion	None	81-gene panel
6	ND	N/D	None	81-gene panel
7	Complex karyotype (detail not available)	N/D	None	81-gene panel
8	41~46,XY,der(7;17)(p10;q10),-16,add(17)(p13),-19,-21,-22,+1~3mar[cp8]	<i>TP53</i> deletion and Monosomy 17	<i>NRAS</i> G13D (5%)	81-gene panel
9	50~55,XX,-X,+1,+3,add(6)(q25),+7,+8,add(14)(p11.2),add(15)(p11.2),+19,add(19)(p13.1),+20,+22,+1~3mar[cp13]/46,XX[7]	N/D	N/D	Only <i>TP53</i> mutation analysis
10	40~46,X,-Y,-4,add(4)(p16),del(5)(q13q33),add(6)(p25),add(7)(q11.2),add(11)(p15),+13,add(13)(p11.2),-15,-16,add(17)(p11.2),-18,-19,-21,+2~6mar[cp18]/46,XY[2]	<i>TP53</i> gene deletion	<i>DNMT3A</i> S638P (23.6%) <i>KMT2A</i> D877G (15.2%)	81-gene panel
11	38~41,X,-Y,-3,add(3)(q12),del(3)(p21),-4,add(8)(p11.2),-9,-10,add(11)(p15),-12,add(15)(p11.2),del(17)(p11.2),-18,der(18)t(11;18)(q12;q23),-19,add(20)(q13.2),add(21)(p11.2),-22,-22,+2~5mar[cp20]	<i>TP53</i> gene deletion and monosomy 17	None	81-gene panel
12	49,X,-Y,t(1;16)(p10;q10),der(4)t(1;4)(q21;q31.3),der(9;13)(p10;q10),del(13)(q12q22),del(14)(q24q32),+5mar[19]/50,idem,+6[1]	N/D	None	28-gene panel
13	ND	N/D	N/D	N/D
14	45,X,-Y,inv(9)(p12q13)[6]/41,idem,-4,del(5)(q13q33),-10,-13,add(17)(p12),-18,add(19)(p13.1),-21,+mar[6]/40~41,idem,-4,del(5)(q13q33),-10,-13,add(17)(p12),-18,add(19)(p13.1),-21,+1~2mar[cp3]/46,XY,inv(9)(q12p13)[5]	<i>TP53</i> gene deletion	None	81-gene panel
15	42~57,XY,+Y,+1,+2,+del(5)(q13q33),+der(6)t(6;11)(q25;q22),+der(6)t(6;11),+add(7)(q22),+10,+13,+15,+17,+18,+19,del(20)(q11.2q13.1),-21,add(12)(p11.2),+1~3mar[cp16]/46,XY[4]	Negative for <i>TP53</i> gene deletion	None	81-gene panel
16	45,XY,del(17)(p11.2),-18[10]/67~71,XY,-Y,+1,+2,+2,+7,+9,-10,-11,-11,-12,+14,-15,+16,del(17)(p11.2),-18,+20,+mar[cp4]/90,XX,-Y,-Y,+2,+2,-4,+6,+6,+7,-12,-12,-15,-15,del(17)(p11.2)x2[5]/46,XY[1]	N/D	<i>FLT3</i> Y572S (1.7%) <i>GATA2</i> R398Q (1.8%) <i>PRPF40B</i> S166L (40.8%)	81-gene panel
17	46,XX,der(5)del(5)(q12q23)t(5;5)(p15.1;q35),add(16)(p13.3),der(19)ins(19;5)(p13.3;q31q31)dup(5)(q31q31),-22,+1~2mar[cp8]/46,XX[12]	Negative for <i>TP53</i> gene deletion	<i>FLT3</i> D835 (0.036)	81-gene panel
18	43~45,XY,-4,add(7)(q22),t(7;7)(q22;q32),-15,del(16)(p11.2),r(17)(p12q12),add(19)(p13.3),i(21)(q10)[cp6]/78<4n>,XXYY,-1,-2,-3,-3,-4,-5,-5,add(7)(q22)x2,add(8)(q24.2)x2,add(9)(q34),-12,-13,-15,-15,-16,-16,-16,del(16)(p11.2),r(17)(p12q12)x2,-18,-18,add(18)(q21.1),add(19)(p13.3),-21,-21,i(21)(q10)x2,+add(22)(q11.2),+3mar[1]/46,XY[13]	<i>TP53</i> gene deletion and monosomy 17	None	81-gene panel
19	42,XX,-4,del(5)(q13q33),del(7)(q22q34),-11,-12,-14,add(16)(q24),+2mar[cp3]	Negative for <i>TP53</i> deletion	<i>DNMT3A</i> R882H (10.3%)	81-gene panel
20	40~45,XY,add(1)(q31),-2,add(2)(p13),-3,del(4)(q27),-5,del(5)(q13q33),-7,-10,del(10)(q24),-11,add(11)(p15),del(11)(p11.2),-12,-12,-16,add(16)(p13.3),-17,-18,-18,-20,-21,add(21)(p11.2),-22,-22,+1~9mar[cp20]	Monosomy 17	None	81-gene panel
21	38~44,XY,del(5)(q13q33),add(6)(q13),add(7)(q11.2),-8,-12,-13,del(13)(q12q14),-15,add(15)(p11.2),-16,del(17)(p11.2),-19,-20,+r,+1~2mar[cp17]/46,XY[3]	<i>TP53</i> gene deletion and monosomy 17	<i>DNMT3A</i> R882H (29.3%)	81-gene panel
22	44,XX,del(1)(q32),r(7),del(9)(q13q22),add(11)(p15),-14,-16,-17,add(17)(p12),der(22)t(3;22)(q21;q13),+1~2mar[cp19]/46,XX[1]	<i>TP53</i> gene deletion and monosomy 17	<i>JAK2</i> V617F (1%)	81-gene panel

Note: N/D, not done; VAF, variant allele frequency

*FISH was performed using an LSI *TP53*(17p13.1)/*CEP17*(D17Z1) dual color probe (Abbott Molecular, Inc).