

Use of *CBL* exon 8 and 9 mutations in diagnosis of myeloproliferative neoplasms and myelodysplastic/myeloproliferative disorders: an analysis of 636 cases

Susanne Schnittger,¹ Ulrike Bacher,^{1,2} Tamara Alpermann,¹ Andreas Reiter,³ Madlen Ulke,¹ Frank Dicker,¹ Christiane Eder,¹ Alexander Kohlmann,¹ Vera Grossmann,¹ Andreas Kowarsch,¹ Wolfgang Kern,¹ Claudia Haferlach,¹ and Torsten Haferlach¹

¹MLL Munich Leukemia Laboratory, Munich; ²Department for Stem Cell Transplantation, University of Hamburg; and ³Medizinische Klinik III, Universitätsmedizin Mannheim, Germany

Citation: Schnittger S, Bacher U, Alpermann T, Reiter A, Ulke M, Dicker F, Eder C, Kohlmann A, Grossmann V, Kowarsch A, Kern W, Haferlach C, and Haferlach T. Use of *CBL* exon 8 and 9 mutations in diagnosis of myeloproliferative neoplasms and myelodysplastic/myeloproliferative disorders: an analysis of 636 cases. *Haematologica* 2012;97(12):1890-1894. doi:10.3324/haematol.2012.065375

Online Supplementary Table S1. Frequency of *CBL*^{mut} in distinct cytogenetic subgroups (*P* values were calculated comparing patients carrying the respective cytogenetic alteration with patients without).

Cytogenetic subgroup	N. of patients	<i>CBL</i> ^{mut}	<i>P</i>
Normal karyotype	494	45 (9.1%)	n.s.
-Y as sole alteration	21	4 (19.0%)	n.s.
Gain of 1q	5	0 (0.0%)	n.s.
Monosomy 7	9	4 (44.4%)	0.008
Sole trisomy 8	34	2 (5.9%)	n.s.
Sole 12p deletion	5	0 (0.0%)	n.s.
Sole 20q deletion	9	1 (11.1%)	n.s.
Complex karyotype (≥3 clonal alterations)	9	0 (0.0%)	n.s.
Reciprocal translocations	12	0 (0.0%)	n.s.
Other trisomies	13	0 (0.0%)	n.s.
Other alterations	21	6 (28.6%)	0.012
Total	636	63/636 (9.9%)	-

Online Supplementary Table S2. Comparison of biological characteristics and peripheral blood values in *CBL*^{mut} (n=38) and *CBL*^{wt} (n=240) patients in the CMML cohort (n=278).

Parameter	<i>CBL</i> ^{mut}	<i>CBL</i> ^{wt}	<i>P</i>
Male/female (ratio)	40/8 (5.0)	154/76 (2.0)	0.025
Median age, years (range)	73.6 (42.3-88.3)	72.5 (21.9-93.3)	n.s.
Median WBC count, ×10 ⁹ /L (range)	17.9 (3.2-92.3)	13.0 (0.9-129.2)	n.s.
Median hemoglobin level, g/dL (range)	11.2 (7.6-14.2)	10.9 (4.0-18.2)	n.s.
Median thrombocytes, ×10 ⁹ /L (range)	79 (3-139)	92 (5-1,119)	n.s.

WBC: white blood cells.

