
Molecular landscape of acute promyelocytic leukemia at diagnosis and relapse

Annette Fasan,¹ Claudia Haferlach,¹ Karolina Perglerová,² Wolfgang Kern¹ and Torsten Haferlach¹

¹MLL Munich Leukemia Laboratory, Germany and ²MLL2 s.r.o., Prague, Czech Republic

Correspondence: annette.fasan@mll.com.it

doi:10.3324/haematol.2016.162206

Supplementary Appendix

Supplement to: Molecular landscape of acute promyelocytic leukemia at diagnosis and relapse

Supplementary figure legends:

Figure S1: (Pattern of gained and/or lost molecular mutations in 14 APL at diagnosis (D) and at relapse (R). Red boxes indicate presence, grey boxes absence of mutations.

Supplementary methods:

Evaluation of variants:

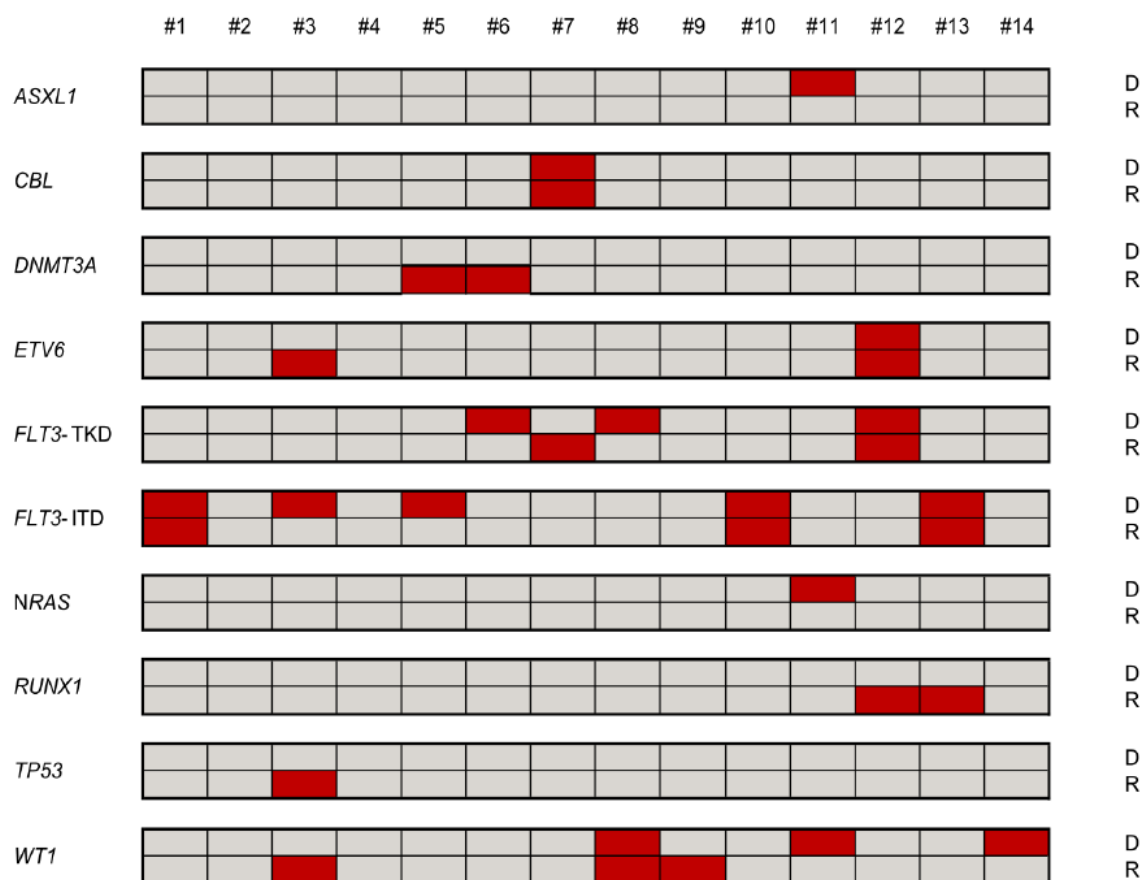
For the evaluation of variants, the following databases were used: COSMIC (<http://cancer.sanger.ac.uk/cosmic>); IARC (<http://www.iarc.fr/>); dbSNP (<https://www.ncbi.nlm.nih.gov/projects/SNP/>); ClinVar (<https://www.ncbi.nlm.nih.gov/clinvar/>).

Variants were categorized as mutation or variant of unknown significance (VUS) according to the following criteria:

- a. mutation
 - Truncating variants (nonsense mutations, essential splice mutations or frameshift indel) in genes implicated in myeloid malignancies
 - Missense/inframe variants with VAF <30%
 - Known oncogenic variants previously reported in the literature and/or in the above mentioned databases
- b. VUS
 - Variants identified outside functional domains
 - Variants with VAF >30%
 - Variants not previously reported in the literature and/or in the above mentioned databases

Variants defined as VUS were not considered in the present study.

Supplementary Figure 1



Supplementary Table 1

Case No	Age	Sex	Diagnosis	therapy upfront	1st relapse [years after ID]	Mutation in <i>PML-RARA</i> present at relapse	relapse therapy	outcome following relapse according to last follow-up
1	52	m	M3v	ATRA + CT	1,0	no	ATRA + CT	unknown
2	71	f	M3	ATRA + CT	5,3	yes	ATO	unknown
3	50	m	M3v	ATRA + CT	1,2	no	ATO + CT	CR
4	67	m	M3	ATRA + CT	1,1	no	ATO + ATRA	Rel
5	62	f	M3	ATRA + CT	3,3	yes	ATO	CR
6	34	m	M3	ATRA + CT	3,2	no	ATO	CR
7	44	m	M3	ATRA + CT	5,4	no	unknown	CR
8	22	f	M3	ATRA + CT	4,4	no	ATO + ATRA	unknown
9	32	m	M3	ATRA + CT	1,0	yes	unknown	CR
10	71	f	M3v	ATRA + CT	2,1	no	ATO + ATRA	CR
11	41	m	M3	ATRA + CT	0,9	yes	ATO + ATRA	CR
12	43	m	M3v	ATRA + CT	1,7	no	unknown	CR
13	53	m	M3v	ATRA + CT	0,9	no	ATO + ATRA	Rel
14	38	m	M3	ATRA + CT	1,8	no	unknown	unknown

Abbreviations: CT: chemotherapy; ATO: arsenic trioxide; CR: complete remission; Rel: relapse;