



International Workshop on CLL
20-23 SEPTEMBER 2019 EDINBURGH

Clinical impact of clonal and subclonal *TP53* mutations and deletions in chronic lymphocytic leukemia: an Italian multicenter experience

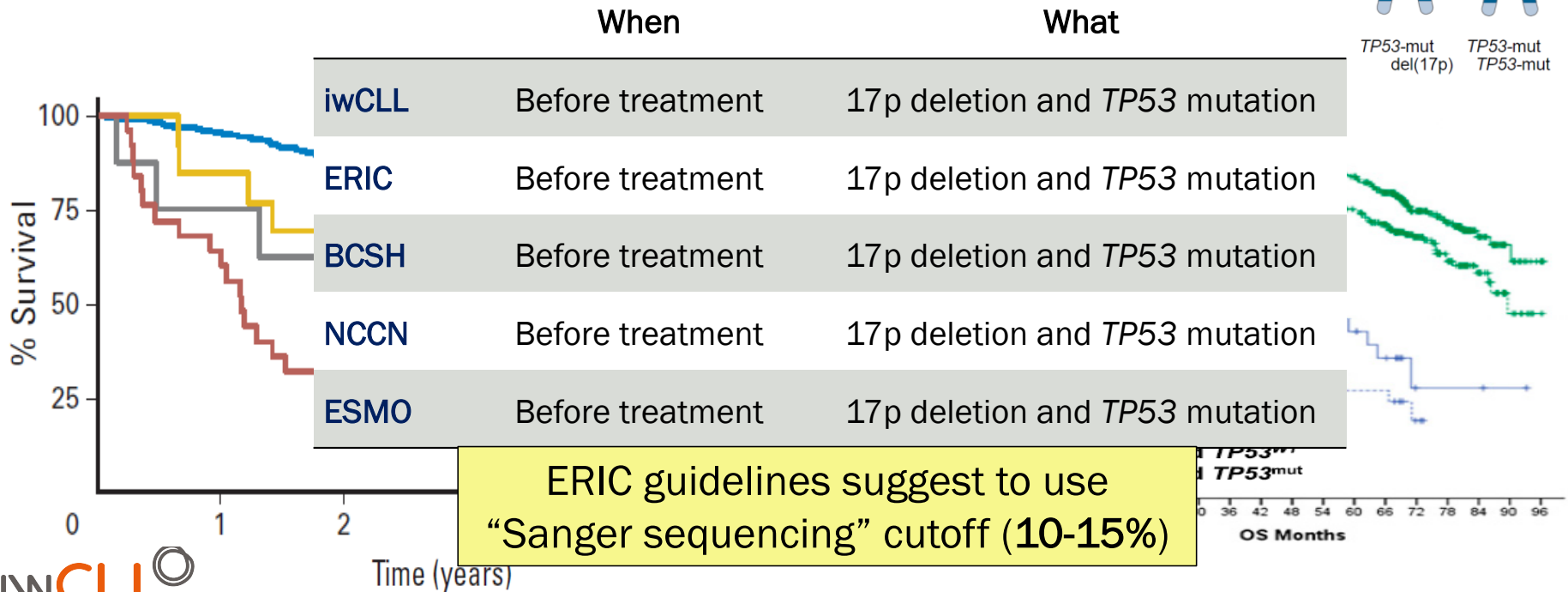
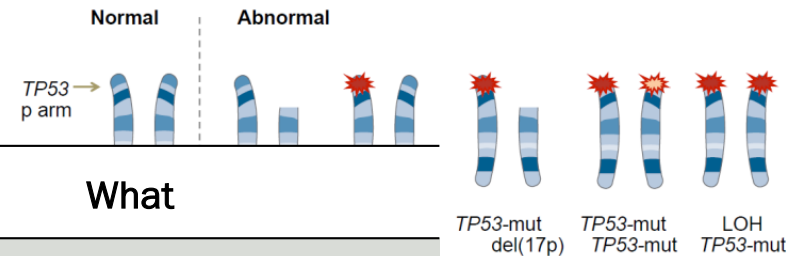
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The authors declare no conflict of interest.



TP53 aberrations as prognostic and predictive markers in CLL

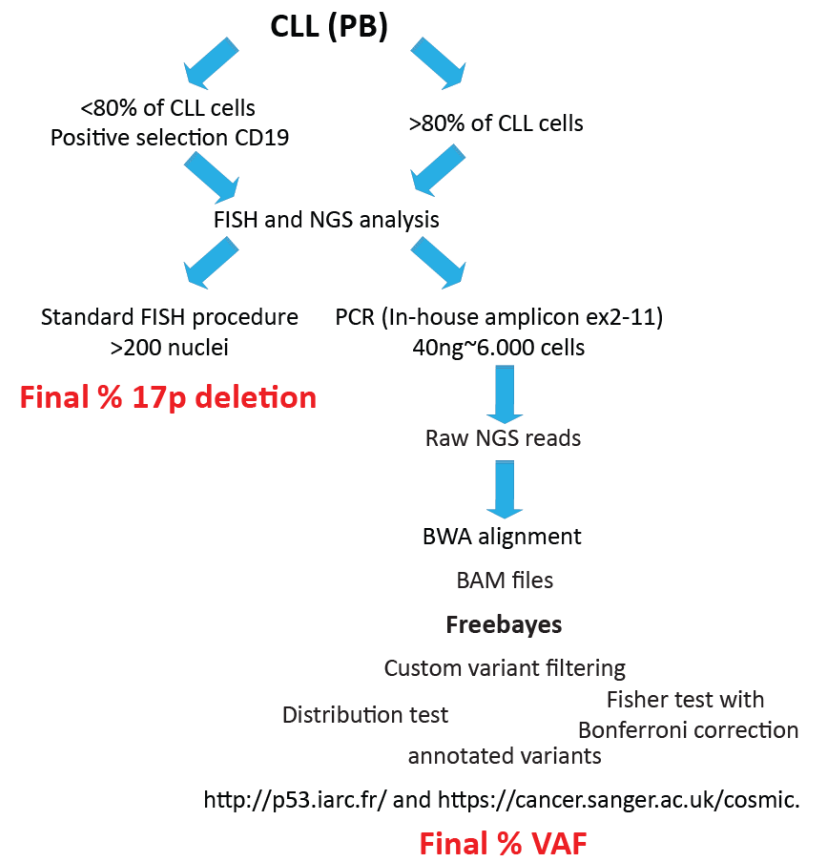
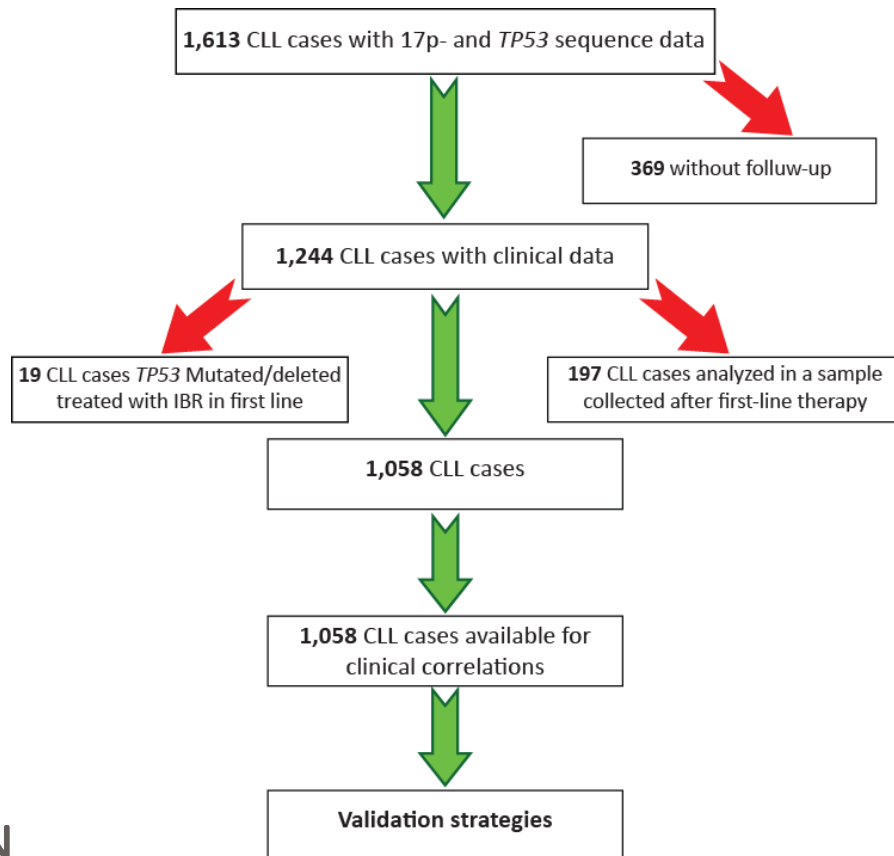
○ **TP53 aberrations** (mutations and deletions).



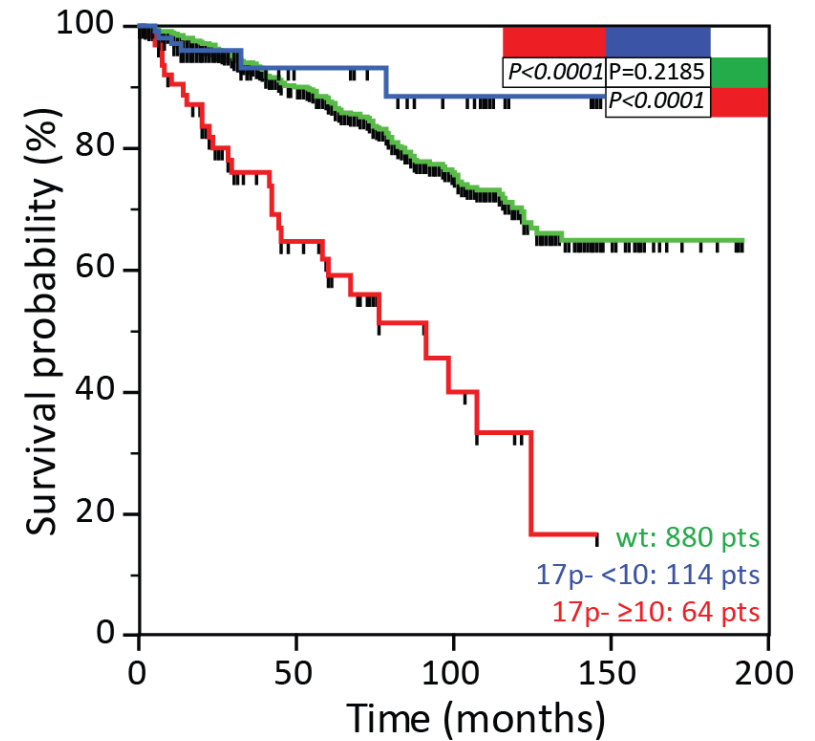
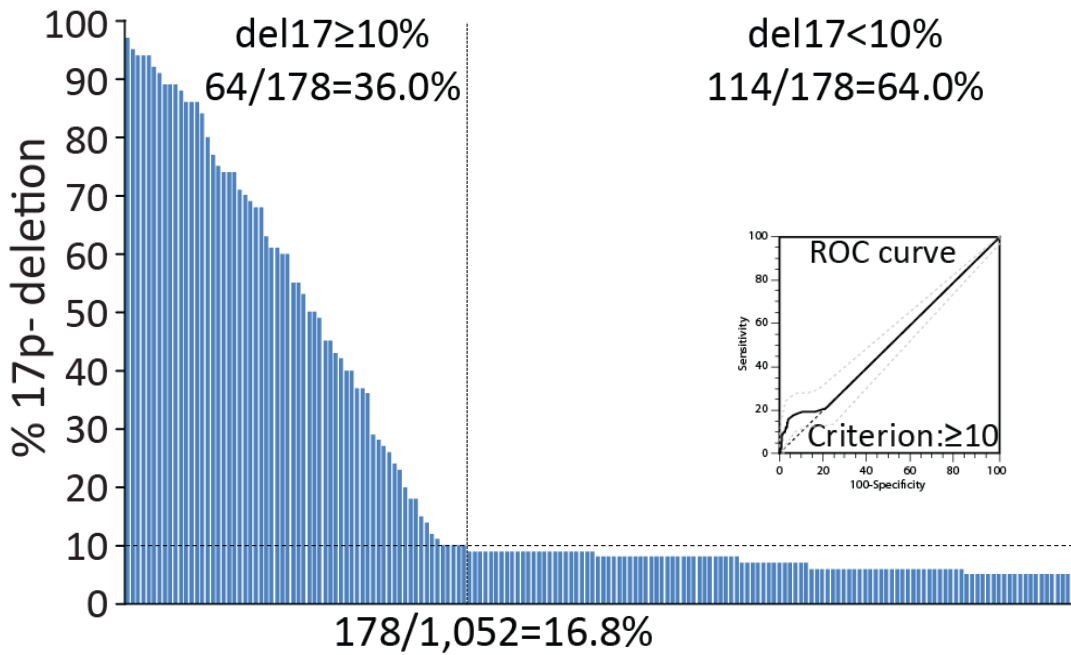
Gonzalez et al, JCO 2011

Stilgenbauer et al, Blood 2014

CLL cohort and methods

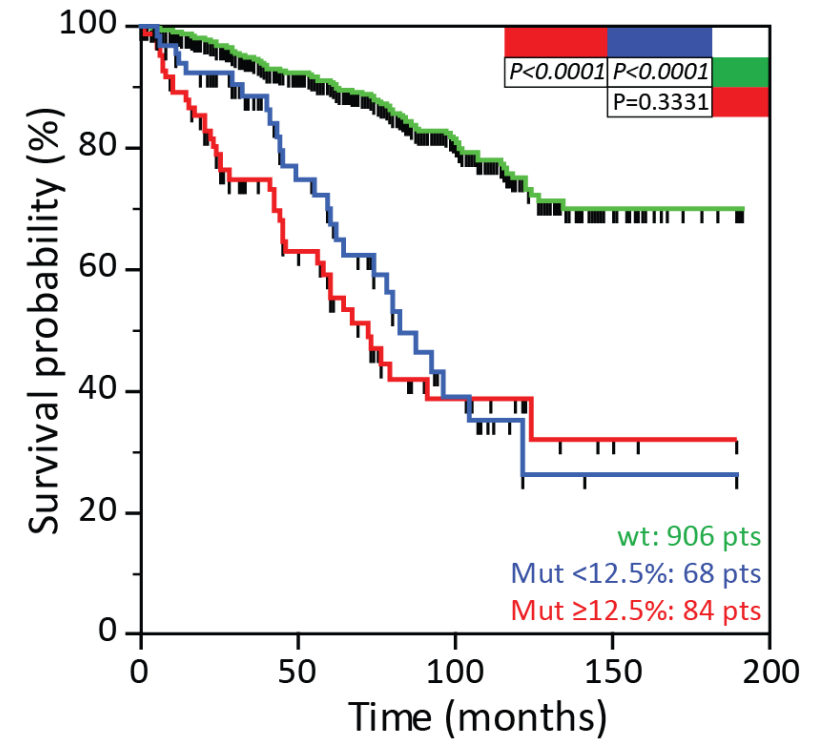
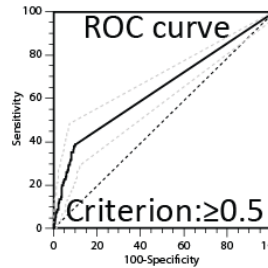
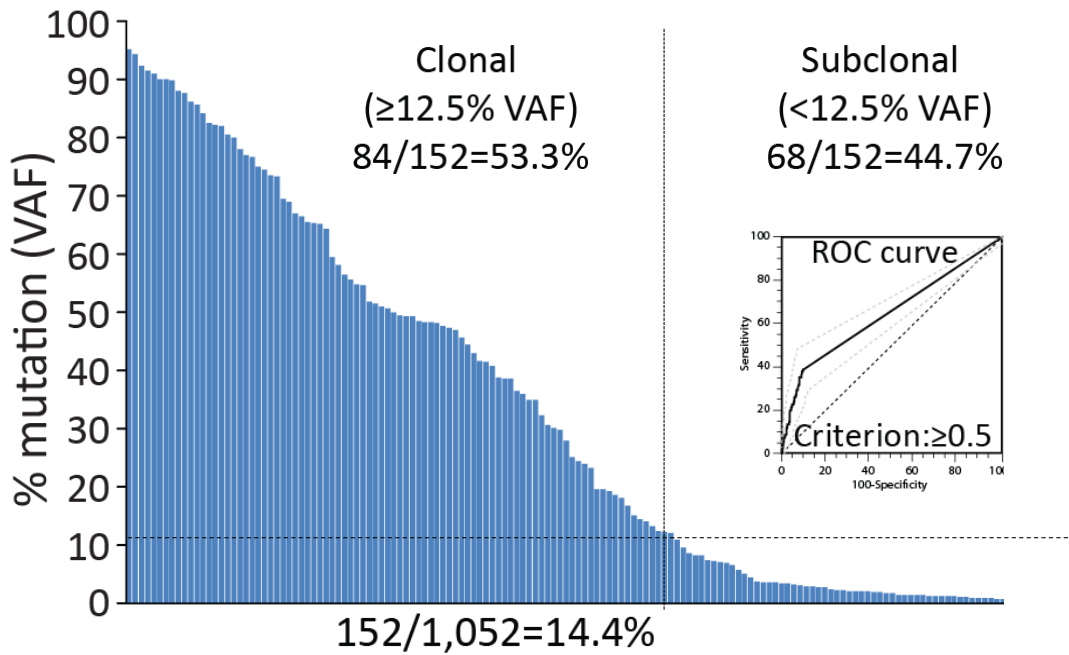


Results: 17p- deletion



	wt 880	482	154	29	0
17p- ≥ 10	64	26	7	0	0
17p- < 10	114	23	14	1	0

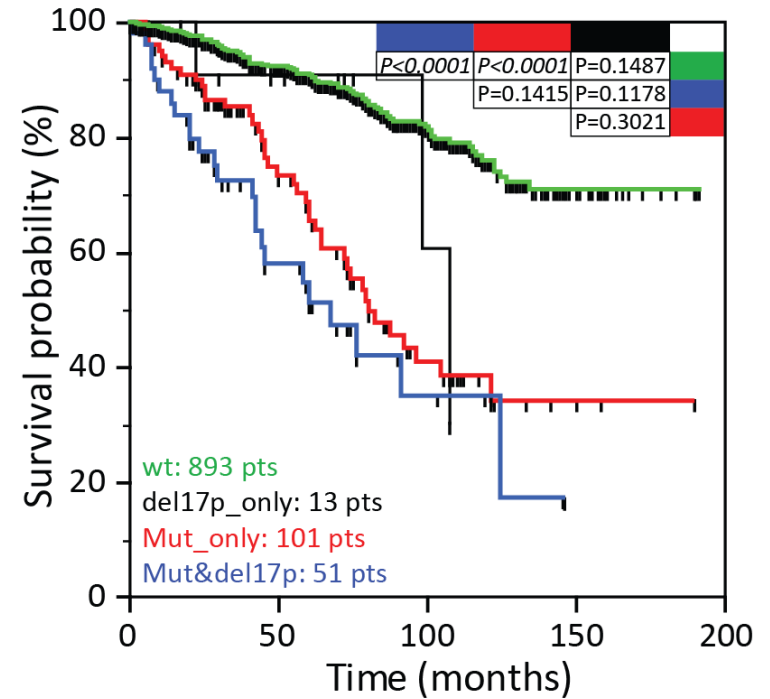
Results: TP53 mutational status



wt	906	464	153	27	0
Mut clonal	84	35	12	2	0
Mut subclonal	67	32	10	1	0

Results: TP53 aberrations

		TP53 mutations	
		wt	Mutated
17p deletion	Deleted	893	101
	Normal	13	51



wt 893	457	151	27	0
del17p_only 13	7	2	0	0
Mut_only 101	48	17	3	0
Mut&del17p 51	19	5	0	0

Conclusions

- 1) 17p- impacted on OS only when detectable in more than 10% of nuclei;
- 2) *TP53* mutations conferred a significant shorter OS irrespectively of VAF percent;
- 3) Subclonal mutations should be considered for the identification of *TP53* mutated cases in a clinical setting.

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