

Clinical Characteristics and Outcome of Acute Leukemia in Lebanese Patients: A Retrospective Observational Analysis

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Background

The molecular characteristics of AML disease remain widely unknown in Lebanon. Cytogenetics and molecular testing in AML is becoming routine practice for disease classification and prognosis.

Objective

Our aim was to describe patients’ characteristics and outcomes, investigating the association between karyotype at diagnosis, and survival in the Lebanese population.

Materials and Methods

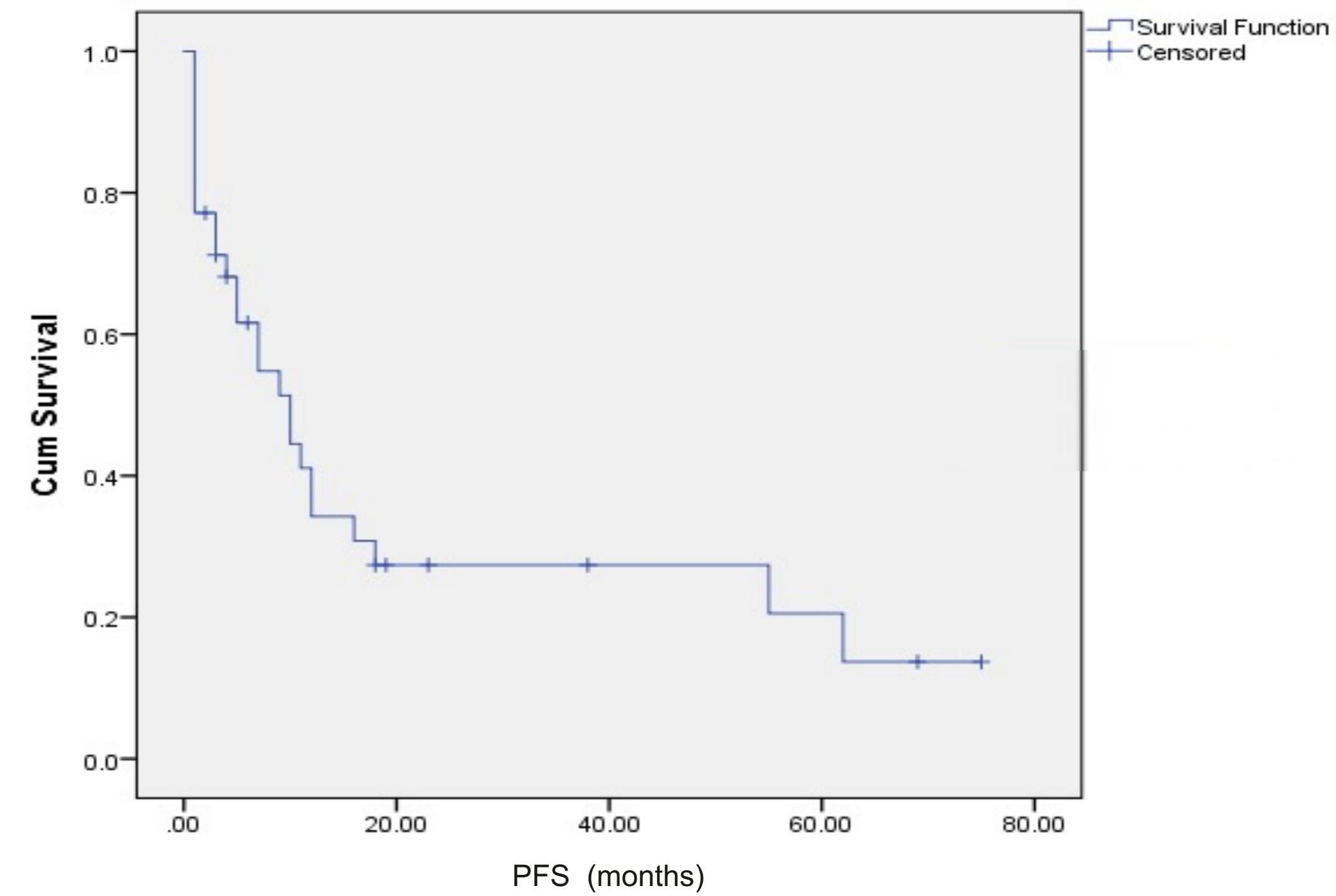
- Medical records of 61 AML patients diagnosed between January 2008 and December 2018 were retrospectively reviewed.
- Inclusion criteria comprised patients diagnosed with AML and receiving treatment, and availability of data on all sequences of therapy. Patients diagnosed with AML-M3 were not included in the study
- Induction therapy with high dose cytarabine + anthracycline. Then if complete remission: consolidation with cytarabine.
- Unfit patients received hypomethylating agent azacytidine

Results

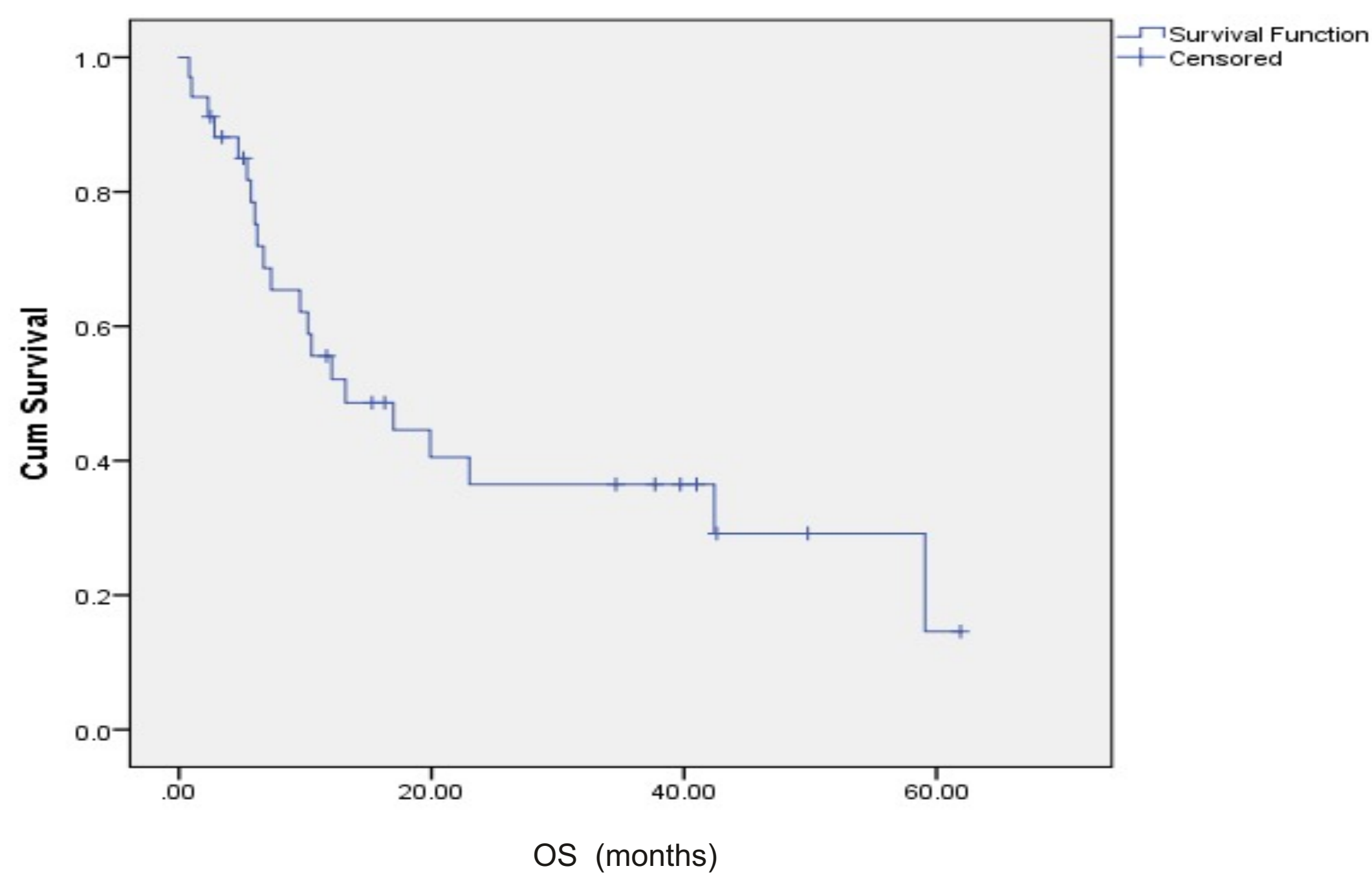
1-Patients Characteristics

Characteristics	
Male (%)	53.7
Median Age (years)	57.06
AML Onset (%)	
de novo	74.1
post MDS	16.7
secondary to solid tumors	9.2
Blood characteristics at diagnosis (%)	
Hyperleukocytosis	22.6
Aplasia	28.6
Stratification (%)	
High risk	13.2
Intermediate risk	41.5
Low risk	5.7
Cytogenetic patterns (%)	
FLT3 +	8
NPM1	4
T(16;16)	0

2- Progression free survival, Kaplan-Meier graph



3- Overall survival, Kapla-Meier graph



• 56% achieved complete remission, 7.5% were in partial remission and 36.5% were primary refractory. 56% relapsed after remission

• No significant statistical correlation was found between karyotype at diagnosis and overall survival [P = 0.4].

•PFS (months)= 10.0 ± 2.6

•OS (months)= 13.2 ± 5.3

Conclusion

- ❖ Our study is the first to describe AML characteristics in Lebanon.
- ❖ Multicenter studies are needed to clarify if the Lebanese population has the same molecular and survival patterns as others described in international data.