



Survival of Patients with Secondary Acute Myeloid Leukemia in a University Hospital in Colombia

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Context

Acute myeloid leukemia (AML) is the most common acute leukemia in adults.

Objective

To determine the OS of patients diagnosed with AML according to the type of AML, de novo (n-AML) or secondary (s-AML) in the Clínica Foscál, a university hospital in Colombia during 2013 to 2020.

Results

A total of 157 patients were registered, 50.3% were male and the median age at the time of diagnosis was 58.8 years range [18-95]. Of these total of patients, 75.2% were n-AML and 24.8% were secondary to chronic myeloproliferative neoplasms (23.1%), therapy (10.3%) or myelodysplasia (4%).

The 74.3% of patients with n-AML were classified in ECOG<2, compared to 65.8% of patients with s-AML.

Most of the patients, for both groups, received intensive chemotherapy with 7+3 induction regimen, the 57.6% of n-AML patients received this regimen, while 30.8% of the patients in s-AML received it.

About the response to induction, the 44.9% of n-AML patients and 30.3% of s-AML patients achieved complete remission. On the other hand, the 10.2% of n-AML patients and 15.2% of s-AML patients died during induction.

The 29.4% of the patients presented relapsed. HSCT were the treatment for 16.9% patients n-AML and 15.4% s-AML.

Table 1. Characteristics of the patients by type AML, FOSCAL

Characteristic	n-AML 118 (75.2%)	s-AML 39 (24.8%)	p-value
Gender Female	62 (52.5)	16 (41.0)	0.212
Age (years) median	57.4 [18-95]	62.3 [26-84]	-
ECOG <2	81 (74.3)	25 (65.8)	0.600
Induction			
7+3 induction regimen	63 (57.6)	12 (30.8)	0.014
Complete remission after induction	44 (44.9)	10 (30.3)	0.184
Death during induction	10 (10.2)	5 (15.2)	0.423
Relapse	29 (24.8)	17 (43.6)	0.026
Allogeneic HSCT	17 (18.7)	6 (15.4)	0.313

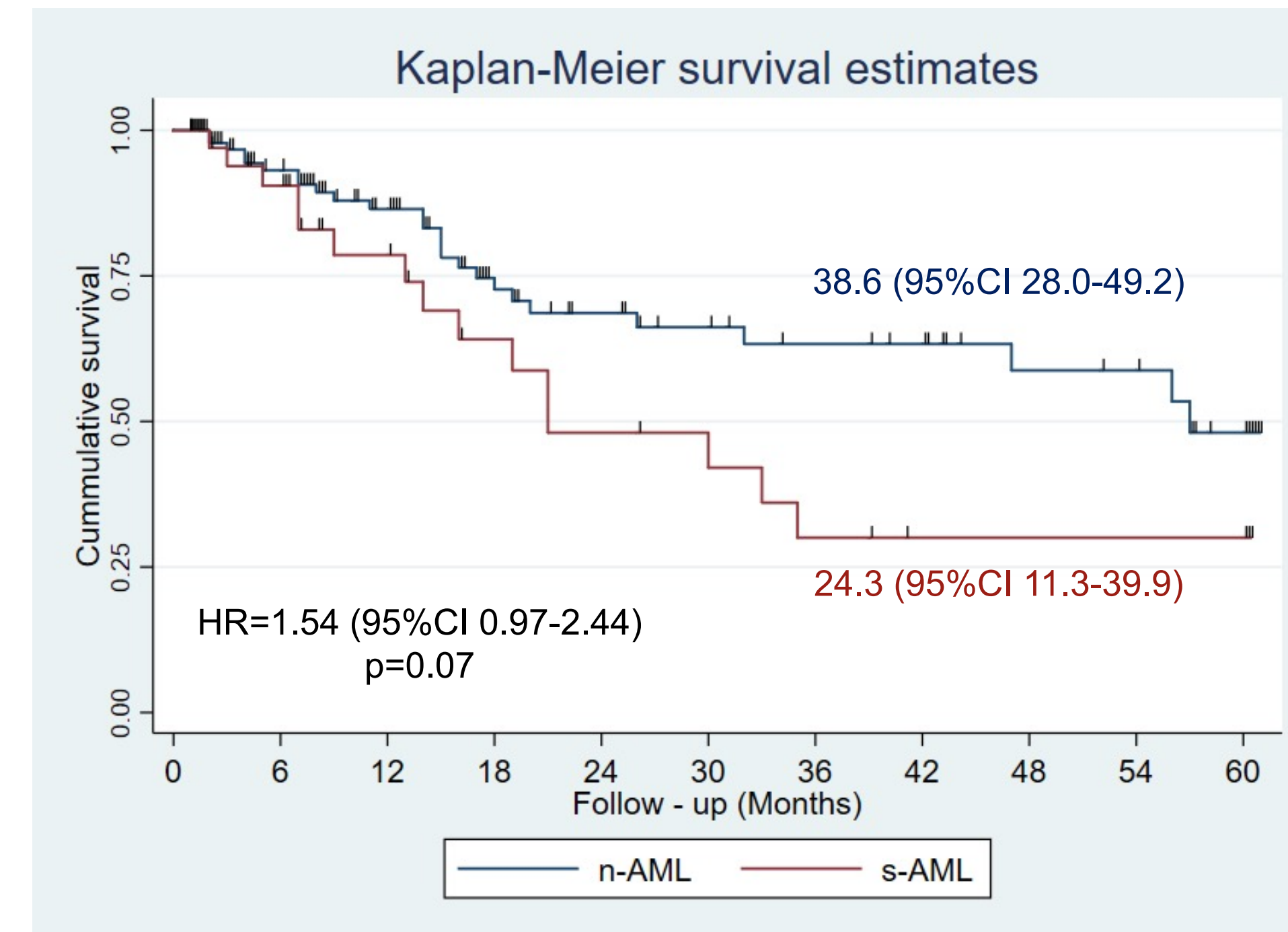
Overall survival (OS) in patients with patients with s-AML the OS were 48.6% (95%CI 31.9-63.4) and 24.3% (95%CI 11.3-39.9) at 1-year and 5-years of follow-up respectively.

Table 2. Survival secondary AML, FOSCAL

Type	Follow-up	OS	95%CI	RFS	95%CI
n-AML	1 year	62.7	52.5-71.3	86.4	76.8-92.5
	5 years	38.6	28.0-49.2	48.1	29.5-64.5
s-AML	1 year	48.6	31.9-68.4	78.6	58.0-89.9
	5 years	24.3	11.3-39.9	30.0	11.7-51.0

Relapse-free survival (RFS) in patients with s-AML the RFS were 78.6% (CI95% 58.0-89.9%) and 30.0% (CI95% 11.7-51.0%) at 1 and 5-years of follow-up respectively.

Figure 1. Overall Survival by type of AML

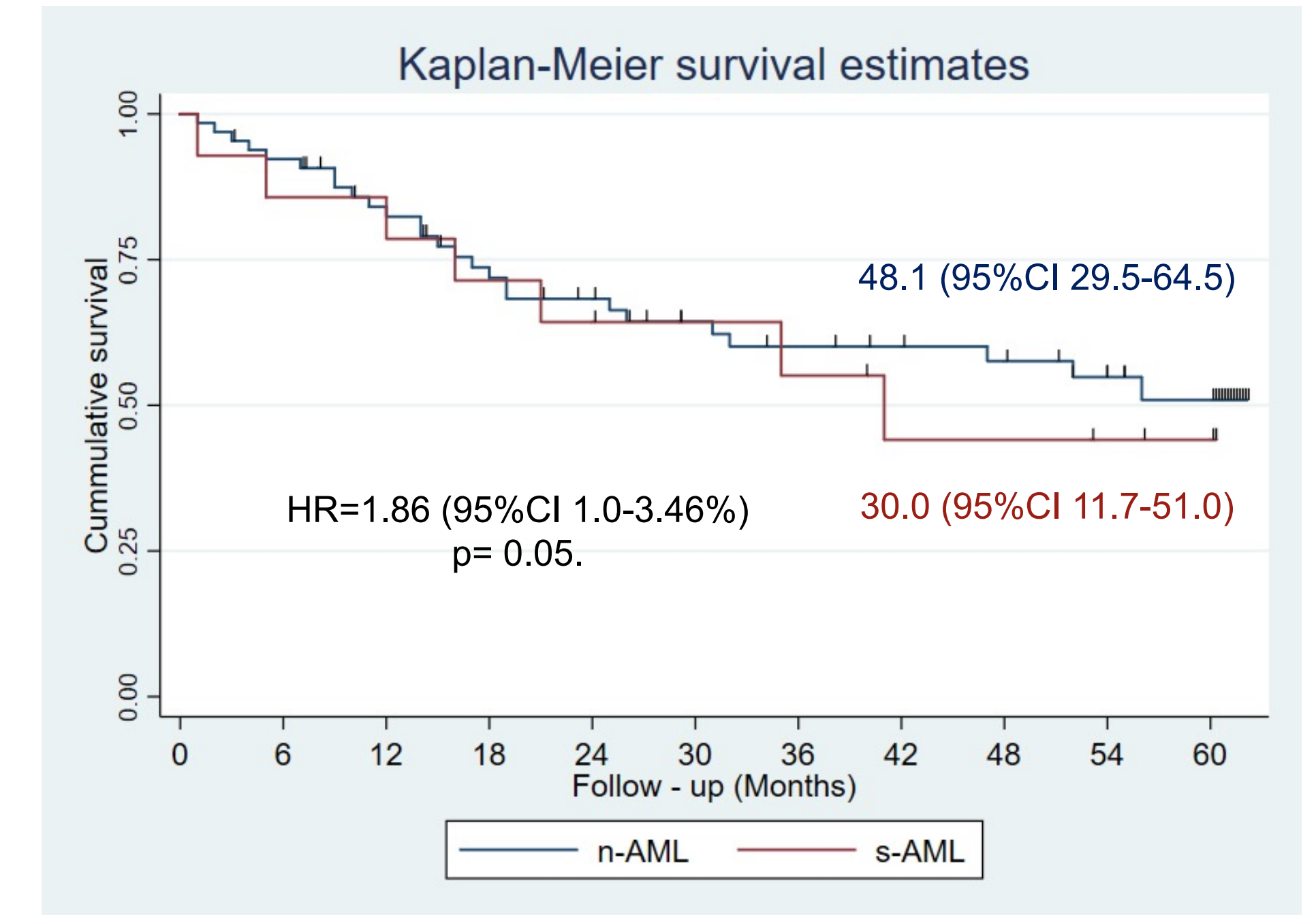


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Figure 2. Relapse Free Survival by type of AML



Conclusion

Our results demonstrated worse outcomes for patients with s-AML compared with patients with de novo AML. It is important to identify s-AML, review their genetic and molecular expressions, so a directed treatment can be offered with major effectivity, and also early allogeneic transplantation.

References

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