Treatment results in patients with AML between 60-75 years. Experience of a center.

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Background

Acute myeloid leukemia (AML) is more common in adults, with 55 to 75% of cases diagnosed in patients older than 65 years. Studies report 3-year survival rates of only 9-10% and 5-year survival of 3-8% in patients aged 60 years or older.

Objective

Assess treatment outcomes in terms of global response (CR and CRi) and to identify impact of clinical and therapeutic characteristics on overall survival (OS).

Materials & Methods

Retrospective cohort study, all patients aged between 60 and 75 years with a diagnosis of AML, in the period between January 2010 and May 2021, treated at a university hospital, were included.
Summary measures were reported as mean with standard deviation or median and interquartile range. Categorical comparisons were made using the chi-square test. Survival analysis was performed using Kaplan Meier and for comparison between subgroups the log-rank test. Cox regression analysis was used for comparative analysis by covariates.

Results

- **89 patients were included, with a median (Me) follow-up of 6.8 months (IQR 1.5-20.1). The baseline characteristics are presented in Table 1.**
- **Figure 1 shows the survival curves in relation to complete remission. CR was achieved in 67.6% of patients that received CMT as first line vs 25% for those who underwent HMA (p<0.001). Figure 2 shows the OS for first-line treatment.**
- **Median OS for patients that underwent BMT was 36.5 months (95% CI 10.4-68.5) vs 4.1 months (95% CI 2.1-6.1) in non-BMT patients (p < 0.001), this difference was statistically significant, regardless of the first-line treatment established in the analysis by stratum.**
- **In the multivariate analysis variables associated with OS were PS [HR 1.5 (95% CI 1 - 2.1); p 0.03], CR [HR 0.5 (95% CI 0.3 - 0.9); p 0.04] and BMT [HR 0.3 (95% CI 0.1 - 0.7); p 0.003].**

Table 1. Baseline Characteristics

VARIABLES	Total (n= 89)	VARIABLES	Total (n= 89)
Female sex n (%)	43 (48,3)	Age Me (IQR)	68,6 (65,1-71,5)
Charlson n (%)		ECOG n (%)	
< 3	70 (78,6)	0	20 (22,5)
≥ 3	18 (20,2)	1	20 (22,5)
Not evaluable	1 (1,1)	≥ 2	48 (54)
		Not evaluable	1 (1,1)
Cytogenetic n (%)		First line n (%)	
Favorable	3 (3,4)	Chemotherapy	34 (38,2)
Intermediate	55 (61,8)	Hypomethylating	40 (44,9)
Unfavorable	20 (22,5)	Support	15 (16,9)
Not evaluable	11 (12,4)		
Secondary AML n (%)	20 (22,5)	Transplant n (%)	21 (23,6)

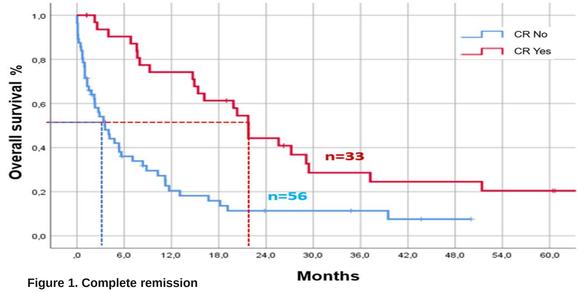


Figure 1. Complete remission

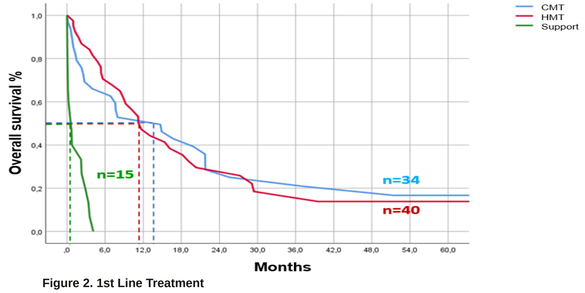


Figure 2. 1st Line Treatment

Discussion

Despite the unfavorable characteristics that the disease presents in this population, it is possible to recognize a subgroup of patients with better OS. In our population, we show that a better PS at diagnosis, achieving a complete remission (CR) with first-line treatment, and accessing a transplant are related to a higher OS.

Based on the results of this study, it is interesting to consider the incorporation of new less toxic therapeutic strategies but with better CR rates that allow greater access to bone marrow transplantation and better PS of patients.

References

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