

Real-life Evidence of Treatment with Venetoclax in Patients with Relapsed or Refractory Acute Myeloid Leukemia

Miriam Saiz-Rodríguez ^{1*}, Jorge Labrador ^{1, 2}, David Martínez-Cuadrón ³, Miguel A. Sanz ³, Pau Montesinos (On behalf of the Pethema group) ³

¹ Research Unit, Fundación Burgos por la Investigación de la Salud (FBIS), Hospital Universitario de Burgos, Burgos, Spain, ² Hematology Deparment, Hospital Universitario de Burgos, Burgos, Spain, ³ Hematology Department, Hospital Universitari I Politècnic La Fe, Valencia, & CIBERONC Instituto de Salud Carlos III, Madrid, Spain

Abstract

The prognosis of patients with relapsed or refractory acute myeloid leukemia (RR-AML) is often poor, and treatment options are limited. The good results of venetoclax (VEN) in untreated AML have led to its off-label use in RR-AML

Background

The use of venetoclax combined with hypomethylating agents or low-dose cytarabine in patients with newly diagnosed acute myeloid leukemia unfit for intensive chemotherapy, was recently approved by the FDA. However, the evidence in relapse or refractory patients is still scarce. To date, this is the largest reported cohort of patients with relapsed or refractory acute myeloid leukemia treated with venetoclax in combination.

Objective

We aimed to analyze the effectiveness of the use of VEN in patients with RR-AML reported to the Spanish PETHEMAAML epidemiological registry.

Materials & Methods

We conducted a retrospective, multicenter, observational study. Patients with AML-RR who received treatment with VEN in the PETHEMA group of hospitals were included.

Summary

The observed responses and OS were far from the results observed in first-line and inferior to most retrospective series in RR-AML due to patients’ poor prognostic features but were very similar to another series with similar characteristics, being an option for RR-AML.

Results

Fifty-five patients were included, 33 men and 18 women, with a median age of 68 years (25–82). With a median follow-up of 167 days, 10/51 patients (19%) continued to receive VEN. Patients received a median of 2 cycles (0–8). VEN was administered with azacitidine (AZA) in 59%, with decitabine (DEC) in 29% and with low-dose cytarabine (LDAC) in 12% of patients, respectively. The CR/CRi and PR rates were 12.4% and 10.4%. The CR/CRi and overall response (OR, CR/CRi+PR) were higher in patients receiving VEN+AZA (17.9% and 32.1%) than in those receiving DEC + VEN (6.7% and 13.3%) or LDAC + VEN (0%). The presence of mutated *NPM1* and monoallelic *CEBPA* were the only two variables associated with increased CR/CRi with VEN in AML-RR. Median OS was 104 days (95% CI: 56–151). Treatment response and ECOG 0 were the only variables that influenced OS in a multivariate model adjusted for age and sex.

Patients who received subsequent salvage therapy had superior OS (98 vs. 5 days, p=0.004). Twenty-eight percent of patients required discontinuation of VEN due to toxicity; 61% of patients required hospital admission, mainly due to infections (45%).

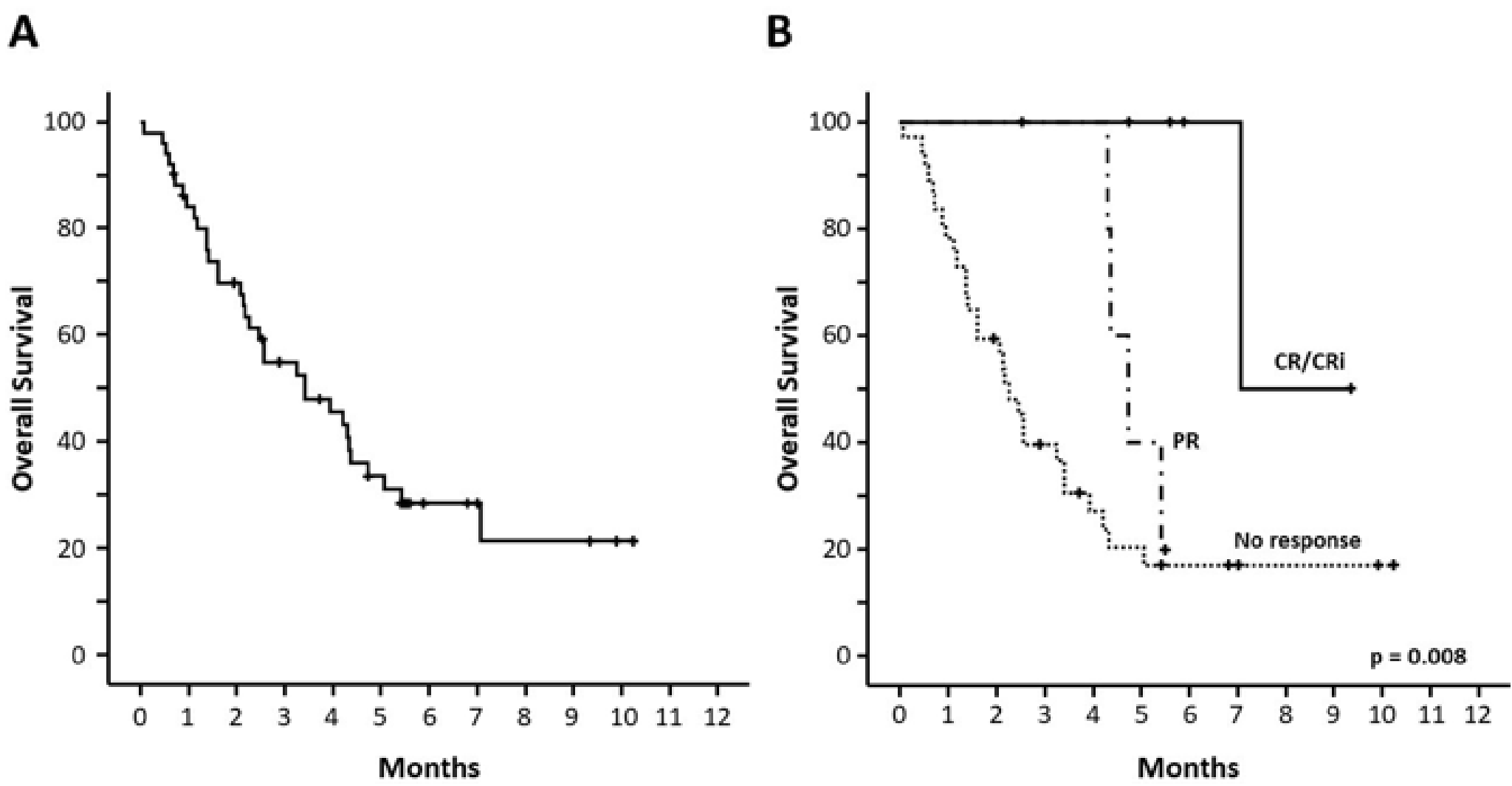


Figure 1. Overall survival from the start of venetoclax according to response.

Discussion

It is still necessary to identify those patients at higher risk of early death who would not benefit from this type of treatment. For these ultra-high risk patients, other treatment strategies should be followed.

References

1. Journal Article, *Name of Journal*
2. Journal Article, *Name of Journal*
3. Journal Article, *Name of Journal*
4. Journal Article, *Name of Journal*

The authors declare no conflicts of interest. There has been no involvement of funding sources in the study design; in the collection, analysis and interpretation of data; in the writing of the report; or in the decision to submit the article for publication.