soho2023
ELEVENTH ANNUAL MEETING

A TERTIARY CENTER'S EXPERIENCE WITH VENETOCLAX-BASED THERAPY IN ACUTE MYELOID LEUKEMIA AND HIGH-RISK MYELODYSPLASTIC SYNDROME

Z. SZAKÁCS[1], S. KOSZTOLÁNYI[1], Á. NAGY[1], J. PAMMER[1], Z. KOHL[1] and H. ALIZADEH[1]
1. First Department of Medicine, Medical School, University of Pécs, Pécs, Hungary

INTRODUCTION

Venetoclax (VEN), a potent Bcl-2 inhibitor, is currently approved in combination with azacitidine (AZA) in acute myeloid leukemia (AML) patients unfit for intensive chemotherapy. Research is still ongoing about the broader indication of its application.

AIM

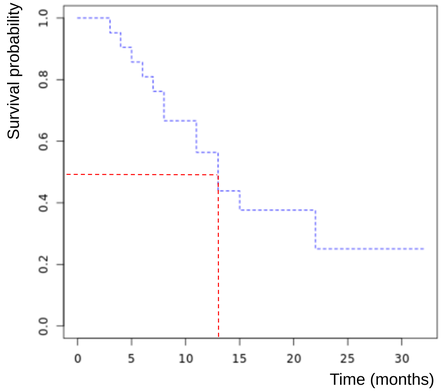
We aimed to analyze data on AML and high-risk myelodisplastic syndrome (MDS-EB1 and -EB2) cases treated with VEN + AZA in our tertiary center at University of Pécs, Pécs, Hungary.

METHODS

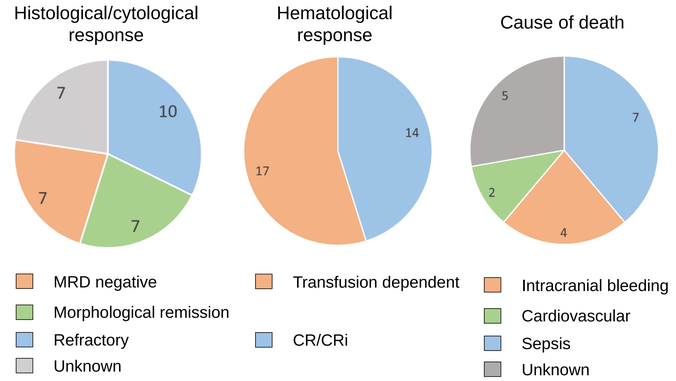
In this retrospective cohort study, we collected patients' data from our electronic medical database. Eligible patients (1) should have pathology-verified AML at any risk or high-risk myelodysplastic syndrome (MDS-EB1 and -EB2) and (2) should receive VEN in combination with AZA as first- or later line treatment. Study outcomes included overall survival, histological/cytological response (measurable residual disease (MRD) status), and clinical response (complete remission/complete remission with incomplete count recovery (CR/CRi) or else). Cause of death was analyzed, as well. For continuous variables, we calculated median with range. We constructed a Kaplan-Meier curve for overall survival.

RESULTS

Between May 2020 and Sept 2022, a total of 31 patients received VEN therapy in our institution (5 with MDS and 26 with AML). Among MDS cases, 1 received 8 cycles of VEN-AZA followed by haploidentical allogen stem cell transplantation (allo-SCT); 1 received 5 cycles of VEN-AZA and achieved CR/CRi; 2 received VEN-AZA for less than 2 cycles and died (1 refractory case, the other had stable, MRD negative disease but died in acute myocardial infarction); and 1 was refractory and switched to best supportive care after 1 month of treatment. Among the 26 AML patients, 4 received VEN as part of conditioning and/or bridging before allo-SCT (none achieved CR/CRi before transplantation): 1 died in intracranial bleeding before ASCT, the other 3 underwent successful ASCT (2 died in early relapse, 1 had an unknown outcome). The other 22 AML patients received first- or later line VEN+AZA treatment: 9 achieved MRD negativity at some point of treatment (there was no follow-up biopsy in 4 cases), 14 died during follow-up (3 achieved MRD negativity, median survival 8.1 months, range: 3.0-21.7 months), 8 are still alive (6 achieved MRD negativity, all were at least for a period in CR/CRi, median follow-up 17.1 months, range: 8.0-32.1 months). The main causes of death were sepsis and intracranial bleeding.



Kaplan-Meier survival curves for overall survival. Patients who are still alive were censored. 50% of the patients were at 13 month still alive (indicated by the red, dashed line). In this analysis, only patients with acute myeloid leukemia were included.



Pie charts showing histological/cytological response, hematological response, and cause of death among patients. The numbers in the figures indicate the number of patients. CR/CRi: complete remission/complete remission with incomplete count recovery, MRD: measurable residual disease.

CONCLUSIONS

Our results are comparable to those reported in the literature (e.g., in the VIALE-A Study): VEN in combination with AZA is a good therapeutic option in unfit AML patients. However, its use in other indications, e.g., as part of bridging or in subpopulations of AML and MDS patients (e.g., by genetic profile) requires further studies.

CONTACT INFORMATION

Zsolt Szakács: email: szakacs.zsolt@pte.hu