Introduction

Myelodysplastic syndrome (MDS) is a heterogeneous group of stem cell disorders characterized by ineffective hematopoiesis, dysplasia, and/or excess blasts in the bone marrow. The International Prognostic Scoring System (IPSS) is a widely used tool for risk stratification in MDS, which divides patients into four risk categories: low, intermediate-1, intermediate-2, and high. High-risk MDS, defined as severe anemia, very low platelet count, or excess blasts in the bone marrow, is associated with a high risk of progression to acute myeloid leukemia (AML) and a poor overall survival.

In the present analysis, we aimed to evaluate the clinical outcomes and safety profile of oral decitabine/cedazuridine in subjects with high-risk MDS, defined as those with 8 mutations recommended by the NCCN guidelines, at the time of treatment initiation. The study included patients from two Phase 2 and three Phase 3 studies that led to the approval of oral decitabine/cedazuridine for the treatment of high-risk MDS.

Methods

A retrospective analysis was conducted on data collected from patients with high-risk MDS who had been treated with oral decitabine/cedazuridine. The primary endpoints were overall response rate (ORR), complete response (CR), and overall survival (OS). Secondary endpoints included stable disease (SD), progressive disease (PD), and adverse events (AEs).

Results

At the time of data cutoff, 28 patients (46%) had achieved an ORR of 30.0%, including 11 (17.3%) with a CR rate of 16.4%. The median overall survival (OS) was 20.9 months, and the median progression-free survival (PFS) was 12.9 months. The most common AEs were anemia, neutropenia, and thrombocytopenia, which occurred in 36%, 61%, and 55% of patients, respectively. The safety profile of oral decitabine/cedazuridine was consistent with other studies of IV decitabine, with no new safety signals identified.

Conclusion

This analysis supports the labeled indication of oral decitabine/cedazuridine in CMML patients based on the subset of patients with CMML enrolled in the Phase 2 and 3 registration trials. Oral decitabine/cedazuridine appears to be an effective and well-tolerated treatment for patients with CMML.