Clinical outcomes and healthcare resource utilization in patients with lower-risk myelodysplastic syndromes reinitiating erythropoiesis-stimulating agents (ESAs) following previous ESA treatment

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Introduction

- Myelodysplastic syndromes (MDS) are a group of stem cell disorders characterized by impaired hematopoiesis, peripherally cytopenias such as anemia, and risk of progression to acute myeloid leukemia (AML)1
- Most patients with MDS are diagnosed with lower-risk (LR-MDS), defined according to the International Prognostic Scoring System (IPSS) or Revised IPSS (IPSS-R) metrics2
- LR-MDS-related anemia can lead to red blood cell transfusion dependence, which impacts patient survival (median survival estimated to be 5-10 years) and health-related quality of life3
- Erythropoiesis-stimulating agents (ESAs) are utilized as first-line treatment for anemia in LR-MDS. However, real-world treatment patterns, clinical outcomes, and healthcare resource utilization (HCRU) for patients with LR-MDS are not well-established

Objectives

- To examine real-world treatment patterns, clinical outcomes, and HCRU, in a cohort of LR-MDS patients and in a subgroup of patients who discontinued and reinitiated ESA therapy

Methods

- Data source: A retrospective cohort study of patients with LR-MDS receiving ESA treatment in the Syapse Learning Health Network, which includes records of patients with cancer who receive care in the US community health setting
- This study utilized secondary data manually curated from patient electronic medical records (EMRs) by certified tumor registries
- Inclusion criteria: Patients diagnosed with LR-MDS who received ≥1 ESA treatment (as first-line therapy) between January 1, 2016 and June 30, 2019
- Exclusion criteria: Patients had ≥2 distinct clinical encounters (defined as any evidence of interaction with the health system), with ≥1 encounter subsequent to the initiation of ESA therapy

Exclusion criteria

- Treatment with: an ESA prior to MDS diagnosis; luspatercept or lenalidomide at any time during follow-up; any of the following prior to initiating ESA therapy: granulocyte colony-stimulating factors (G-CSF), hematopoietic agents (HMAs), thrombopoietin receptor agonists, immunomodulatory therapies, andsrogens
- Hematopoietic stem cell/bone marrow transplantation (HSCT/BMT) after LR-MDS diagnosis and prior to initiating ESA therapy

Statistical analysis

- Patients were followed from the time of ESA initiation (index date) until the corresponding outcome/endpoint of interest. Results were estimated using Kaplan-Meier survival methods and compared with the log-rank test

Results

- Of the 2308 patients with evidence of MDS, 108 had LR-MDS and initiated ESA therapy within the study window (Figure 1)

Conclusions

- In this real-world study of community practice in the USA, reinitiation of ESA therapy after prior discontinuation in LR-MDS was prevalent
- The frequency of ESA-treated patients with LR-MDS who did not achieve TCV and the demonstrated burden on health systems support the need to consider alternative treatment and management options for patients with LR-MDS

References

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Disclosures

- G.W.-N., Adès, Bristol-Myers Squibb; Genentech and Helixon - consultancy; Abbvie, Amgen, Aplikta, Celgene, Elanco, Elysera, HD Biosolutions; Janssen, Merck, Novartis, Dicona - research funding; A.K.M., T.O.B., D.L.N., R.Indeed, Bristol-Myers Squibb; Genentech and Helixon - consultancy; Abbvie, Amgen, Aplikta, Celgene, Elanco, Elysera, HD Biosolutions; Janssen, Merck, Novartis, Dicona - research funding; A.K.M., T.O.B., D.L.N., R.Indeed

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