Abstract: P790

Title: RED BLOOD CELL TRANSFUSION DEPENDENCY BURDEN IN LOWER-RISK MYELODYSPLASTIC SYNDROME PATIENTS IN FRANCE - EDELWEISS STUDY

Abstract Type: Poster Presentation

Topic: Myelodysplastic syndromes - Clinical

Background:

Myelodysplastic syndromes (MDS) are a heterogeneous group of hematological malignancies, characterized by ineffective hematopoiesis leading to peripheral cytopenias. Management of lower-risk MDS (LR-MDS) is mainly focused correcting of cytopenias, especially chronic anemia (80% of cases). Erythropoiesis-stimulating agents (ESAs) are the first-line treatment to prevent the need for red blood cell transfusions and their clinical consequences. The real-world epidemiology of LR-MDS patients is not well understood due to under-reporting in registries.

Aims:

The objective of this study was to describe adult LR-MDS population in France who received first-line therapy and the burden associated with transfusion dependency.

Methods:

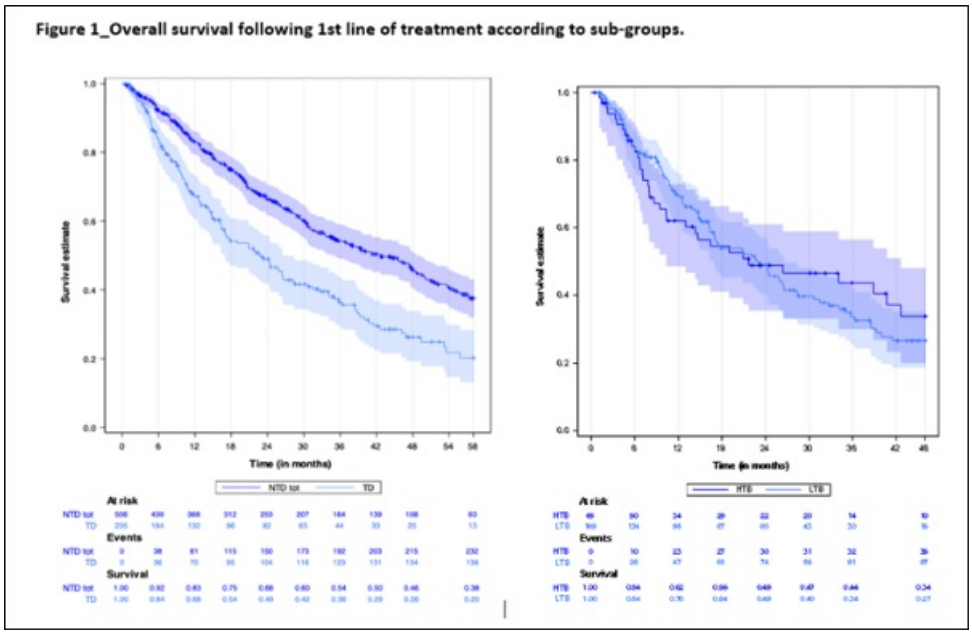
This retrospective study is based on an established, 2/100ths representative random sample of the French National Healthcare Data System (ESND). The data collected corresponds to all outpatient, ambulatory and hospital care in France. Adult patients with a diagnosis of MDS, at low risk and receiving first-line treatment (index date) between 01/01/2018 and 31/12/2022 were included. Patients were followed until death, end of study period or loss of follow-up. Comorbidities and history were collected over a 5-year retrospective period prior to inclusion. Patients were split according to their red blood cell transfusion history, in line with IWG 2018 criteria, defining the Non-Transfusion Dependent (NTD) group (no transfusion within the 16 weeks prior to first-line) and the Transfusion Dependent (TD) group (transfusion within the 16 weeks prior to first line). The TD patients was divided in two sub-groups: the High Transfusion Burden (HTB) sub-group (patients transfused 4 times or more) and the Low Transfusion Burden (LTB) sub-group (patients transfused 1-3 times). Overall survival (OS) was estimated by the Kaplan-Meier (KM) method. Post-inclusion treatment sequences in terms of ESAs, azacitidine, lenalidomide, GCSF, luspatercept and transfusions were represented graphically.

Results:

A total of 822 patients were included: 555 NTD (67.5%) and 267 TD (32.5%). Among TD group, 74 patients were HTB (27.7%), 193 were LTB (72.3%). The mean age of patients was 80.1 years (±9.44) at inclusion, with no significant difference between NTD and TD groups.TD patients were more often male (55.4% vs. 46.8 % NTD; $p<0.08$) and had more cardiovascular comorbidities (TD: 54.3%, NTD: 44.9%; $p<0.01$) and chronic renal failure (TD: 34.5%, NTD: 24.1%; $p<0.01$). The first line of treatment was mainly ESA for 97.8% of patients (2.2% Lenalidomide). For all patients, median OS (mOS) was 34.5 months (95% CI: 30.3; 39.4), with 12 months, 24 months and 36 months OS of 78%, 61%% and 49%, respectively. OS of NTD and TD patients were significantly different (mOS: 37.4 months vs. 28.0 months, $p<0.001$). Among TD sub-groups, OS of HTB patients and LTB patients were not significatively different (mOS: 25.7 months vs. 24.9 months, $p<0.745$) KM estimates of OS in each subgroup are presented in the figure.

Summary/Conclusion:

This study provides recent, nationally representative data on patients treated for LR-MDS with anemia in France. It confirms the poorer prognosis of TD patients following initiation of the first line of treatment compared to NTD patients.



Keywords: Real world data, Treatment, Transfusion, Myelodysplastic syndrome