Azacitidine for treatment of patients with myelodysplastic syndromes (MDS): practical recommendations of the German MDS Study Group.

Abstract:
Myelodysplastic syndromes (MDS) are a group of common bone marrow disorders characterized by ineffective hematopoiesis, peripheral cytopenias, and a substantial risk of progression to acute myeloid leukemia (AML). For many years, the main treatment option for MDS was best supportive care which alleviates symptoms, but has no effect on the natural course of the disease. Recently, demethylating agents have become available as a promising new treatment for patients with MDS. In two randomized clinical trials, the demethylating agent azacitidine has demonstrated a reduced risk of transformation to AML, improvement of peripheral blood values, an improved quality of life, and a definite survival advantage compared to conventional care regimens for patients with International Prognostic Scoring System score of intermediate-2 or high-risk MDS. This review aims to provide practical recommendations for the use of azacitidine and the management of its side effects in patients with MDS, assuring safe administration and best efficacy of treatment.