A 100-year perspective on Myelodysplastic syndromes: moving towards personalized management

Mechanisms

- Genetics
- Epigenetics
- Immunology
- Microenvironment

Accumulation of immature cells → Increased apoptosis → Cytopenia → MDS

Higher risk MDS
- Treatment dominated by monotherapy with hypomethylating agents
- Novel combinations are currently being evaluated in clinical trials

Lower risk MDS
- Erythropoietic agents (ESAs) is first-line treatment for the anemia
- Luspatercept has shown promise as second-line therapy for sideroblastic MDS
- Lenalidomide is established second-line treatment for del(5q) lower-risk MDS

Hellström-Lindberg et al., Haematologica, 2020