Evolving Treatment Paradigms in Early Myelofibrosis

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Early myelofibrosis (MF), encompassing prefibrotic myelofibrosis and lower-risk overt primary myelofibrosis, is a clinically and biologically heterogeneous disease state. Patients may experience a wide spectrum of disease manifestations, ranging from minimal symptoms to clinically significant inflammatory burden and progressive marrow fibrosis. As a result, management strategies vary, and the optimal timing and selection of disease-directed therapy in early MF remain areas of ongoing discussion.

This session will present an evidence-based overview of recent therapeutic advances relevant to the management of early MF. Particular attention will be given to treatment approaches that have been evaluated in patients with preserved blood counts and lower-risk disease. The role of pegylated interferon will be reviewed, including data on hematologic and symptomatic responses, effects on driver mutation allele burden, and potential impact on clonal evolution. Practical considerations such as patient selection, tolerability, treatment duration, and monitoring will be discussed, alongside current limitations in the evidence regarding long-term disease modification.

The session will also examine the use of JAK inhibitors in early MF, an area in which clinical consensus continues to evolve. While JAK inhibition is well established for symptomatic intermediate- and high-risk MF, its role in early or lower-risk disease has primarily been explored for the management of constitutional symptoms, splenomegaly, and inflammatory features. Available clinical trial data and real-world experience will be reviewed, with emphasis on anticipated benefits, safety considerations, and recognized limitations, including the lack of conclusive evidence for delaying fibrotic progression or improving survival in this patient population.

In addition, the session will address risk stratification in early MF, integrating clinical parameters, molecular profiling, and contemporary prognostic models to support individualized treatment decisions. Emerging investigational approaches, including interferon-based combination strategies and novel agents targeting fibrosis, inflammation, and epigenetic dysregulation, will be briefly highlighted as areas of active research.

Overall, this session aims to provide a balanced, guideline-aligned synthesis of current evidence, outlining areas of consensus as well as remaining uncertainties, to support informed and individualized clinical decision-making in patients with early myelofibrosis.