Diagnostic Work-up for PMF

Basic Investigations
- Medical history (history of thrombosis)
- Physical examination, including palpation of spleen
- CBC and blood smear examination
- Iron status and LDH

Anemia, splenomegaly, ↑LDH, and leukoerythroblastosis

Suspected PMF*

Use bone marrow morphology for specific diagnosis

JAK2 V617F+

CALR+

MPL+

‘Triple-negative’
Consider screening for other clonal markers if feasible

*Consider performing bcr-abl as an initial step in all patients. Abnormal karyotype in myelofibrosis can be used to confirm clonal myeloproliferation and, in some instances, facilitates the distinction between MF and bone marrow fibrosis associated with another myeloid malignancy, such as chromosome 5q deletion syndrome.

LDH: lactate dehydrogenase; PMF: primary myelofibrosis; Janus kinase 2; MPL: myeloproliferative leukemia gene; CALR: calreticulin.