Bristol Myers Squibb®

Myelofibrosis

Myelofibrosis is a rare but serious cancer of the bone marrow that disrupts the body's normal production of blood cells.

About myelofibrosis

Myelofibrosis is a myeloproliferative neoplasm (MPN), a group of blood cancers that derive from blood-forming stem cells. Two other blood cancers that are also grouped as MPNs are essential thrombocythemia and polycythemia vera.

There are two main types of myelofibrosis:

1 **Primary myelofibrosis:**
Patient has no prior history of another MPN

2 **Secondary myelofibrosis:**
Patient develops the condition as a complication of essential thrombocythemia or polycythemia vera

The cause of myelofibrosis remains unclear, but more than half of patients have a mutation in the Janus Kinase 2 (JAK2) gene.

Incidence

Median age at diagnosis:

65

Primary myelofibrosis is rare, affecting approximately

1 in 500,000
people worldwide

Risk factors

- Age
- History of thrombocythemia or polycythemia vera
- Exposure to certain industrial chemicals or high radiation levels

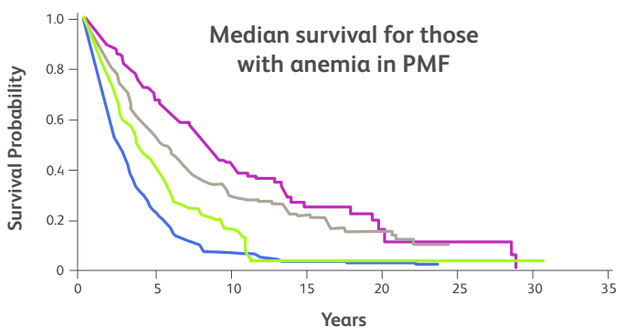
Symptoms

About one-third of patients with myelofibrosis in its very early stages may have no symptoms of the disease.

Signs and symptoms of myelofibrosis can include:

- Fatigue/ weakness
- Shortness of breath
- Chest pains
- Palpitations
- Pallor or pale skin
- Loss of appetite

Prognosis



- **7.9 years** in patients with no anemia
- **4.9 years** in patients with mild anemia (Hb ≥10 g/dL)
- **3.4 years** in patients with moderate anemia (Hb ≥8 and <10 g/dL)
- **2.1 years** in patients with severe anemia (Hb <8 g/dL or transfusion dependent)

Treatment options

Treatment approaches for myelofibrosis are determined by age, abnormal blood cell counts, disease progression and overall health, but may include:

- JAK inhibitors
- Blood transfusions, androgen therapy or other anemia treatments
- Splenectomy (surgical removal of the spleen)
- Stem cell transplant*

*Typically appropriate for ‹5% of patients due to risks associated with the procedure

It is important for people with myelofibrosis to understand the symptoms of their disease and to talk to a healthcare professional about appropriate treatment options.