

Myelofibrosis

MYELOFIBROSIS FAST FACTS

- Myelofibrosis (MF) is a rare bone marrow cancer. It is one of a related group of blood cancers known as "myeloproliferative neoplasms (MPNs)" in which bone marrow cells that produce the blood cells develop and function abnormally. The resulting fibrous scar tissue formation leads to severe anemia, weakness, fatigue and an enlarged spleen and liver.
- MF is a type of chronic leukemia and can occur on its own (primary myelofibrosis) or as a result of another bone marrow disorder. Other MPNs that can progress to myelofibrosis include polycythemia vera and essential thrombocythemia.
- MF develops when a genetic mutation occurs in blood stem cells. The cause of the gene mutation is unknown. Between 50 and 60 percent of people with MF have a mutation of the Janus kinase 2 gene (JAK2). Researchers are investigating other possible gene mutations responsible for MF.

- MF usually develops slowly and some people may live symptom-free for years. Others, however, may get progressively worse, requiring treatment. In both cases, patients do need to be monitored regularly.
- The treatment goal for most patients with MF is to relieve symptoms and reduce the risk of complications. Treatments include blood transfusions, chemotherapy, radiation or removal of the spleen (splenectomy), drugs to treat anemia, and allogeneic stem cell transplantation. Ruxolitinib (Jakafi™) is the first drug approved by the US Food and Drug Administration (FDA) to treat MF because it has been shown to reduce several MF-related symptoms and control spleen enlargement. Other potential therapies for MF treatment are being studied in clinical trials.
- Allogeneic stem cell transplantation (ASCT) is the only potential cure for MF. This treatment has a considerable risk of life-threatening side effects. ASCT is not a good option for most people with MF because of age, the course of their disease or other health problems.