



Frequently Asked Questions About MDS

What is MDS?

MDS, or myelodysplastic syndromes, is a collection of disorders in which the bone marrow does not produce enough blood cells.

Normally, the bone marrow produces three major types of blood cells: red blood cells (which carry oxygen to the blood), white blood cells (which help the body fight infections), and platelets (which help blood clot). In patients with MDS, this process breaks down. Blood cells do not develop properly, and as a result, there is a lack of healthy blood cells in the body.

Is MDS a type of cancer?

MDS is a hematologic neoplasm or malignancy with a variable progression to Acute Myeloid Leukemia (AML) that can be predicted after an initial evaluation is completed. This evaluation includes a bone marrow aspirate and marrow/peripheral blood chromosomal studies.

Why does MDS occur?

MDS is thought to develop due to a primary insult to the bone marrow. Some chemicals or radiation have been determined to cause MDS in some people. A rare, familial form may also develop in patients who have family members with MDS. When patients develop MDS that has no known cause, it is called de novo MDS.

How common is MDS?

It is not known exactly how many people have MDS; however, about 20,000 to 25,000 new cases are diagnosed annually in the United States. It primarily occurs in people older than 60.

What are the symptoms of MDS?

Symptoms vary depending on the individual and the extent of the disease. Typical symptoms include weakness, fatigue, frequent infections, easy bruising, bleeding, fever, weight loss, and a sense of feeling full.

How is MDS classified?

There are several systems that are commonly used to designate the type of MDS that a patient has. These include the French-American-British (FAB) system, the original classification system; the new World Health Organization (WHO) classification system; and the International Prognostic Scoring System (IPSS).

What are the treatment options for MDS?

There are treatment options for patients with myelodysplastic syndromes:

- Most patients will receive supportive care, which includes treatment with erythropoietin +/- G-CSF for raising the hemoglobin level, red blood cell and platelet transfusions. Supportive care also includes close monitoring by everyone on the healthcare team.
- MDS patients who are classified as having MDS deletion 5q can be treated with Revlimid. Revlimid is an immunomodulatory drug that has been approved by the US Food and Drug Administration for use in this type of low-risk MDS. Patients classified as having intermediate-2 or high-risk MDS can be treated with Vidaza or Decitabine, de-methylating agents, approved by the FDA for use in MDS. These patients might include select low or intermediate-1 risk patients.
- In addition, MDS patients might be treated with chemotherapy, bone marrow transplantation, or peripheral blood stem cell transplantation.

How do I know what treatment is right for me?

With MDS, treatment is typically tailored according to the individual's age, general health, type of MDS, and symptoms. For instance, if a patient has low red cells they might be given a red blood cell transfusion or if they have low platelets they might be provided with a platelet transfusions.

For instance, patients younger than 60 are considered better suited for intensive therapies such as bone marrow transplantation.

What is a clinical trial?

A clinical trial is a study conducted by doctors to test investigational therapies or investigational medications. Doctors conduct these trials to see if these investigational treatments can improve on ones they currently use.