

Multiple Myeloma

Multiple myeloma is a cancer that begins in the plasma cells of the body. A plasma cell is found in bone marrow, generates antibodies, and helps fight infections. Researchers do not know the cause of multiple myeloma, but are making progress in understanding how plasma cells become cancerous. When myeloma develops, the cells can create tumors called plasmacytomas. A single plasma cell tumor is called solitary or isolated plasmacytoma. When plasma cells are widespread in the bone marrow, the disease is called multiple myeloma. The prognosis for multiple myeloma patients improved substantially due to ongoing research that led to new drug treatments and stem cell transplant improvements, increasing average survival rates.

Statistics

- In the United States, one in 132 people will be diagnosed with multiple myeloma.
- In 2021, there were approximately **34,920 new cases** of multiple myeloma expected to be diagnosed in the United States. Approximately **12,410 deaths** were expected from the disease.
- In Texas, approximately **2,357 people** were expected to be diagnosed with multiple myeloma in 2021, and an estimated **983 deaths** were expected from the disease.

Risk Factors

Doctors do not know how to prevent multiple myeloma. However, there are several factors that may increase risk:

- Age: Multiple myeloma is more likely to be diagnosed in people 65 and older.
- **Gender:** More men than women are diagnosed with the disease. Last year, approximately 3,700 more men than women were expected to be diagnosed with multiple myeloma.
- Race: African Americans are more than two times as likely to be diagnosed with the disease than Caucasians.
- **Family history:** People with immediate family members who have had multiple myeloma are more likely to develop the disease.
- Other conditions: Having solitary plasmacytoma or monoclonal gammopathy of undetermined significance (MGUS), a condition in which plasma cells make too many copies of the same antibody, increases risk of developing multiple myeloma. Those diagnosed with other plasma cell diseases may later develop multiple myeloma. Obesity and exposure to radiation also raise risk.

Symptoms

Patients in the early stages of multiple myeloma do not always show symptoms or their symptoms may resemble those of other diseases. Common symptoms include:

- Bone pain, often located in the ribs, hips, skull, or back
- Weak or easily broken bones
- Persistent thirst or dehydration
- Unexplained weight loss or loss of appetite
- Abdominal pain
- Shortage of red blood cells (anemia), white blood cells (leukopenia), or platelets (thrombocytopenia)
- Weakness on one side of body, slurred speech
- Hyperviscosity (thickening of the blood)

- Muscle weakness, dizziness, drowsiness, confusion, restlessness, or fatigue
- Nausea or vomiting
- Frequent urination
- Impaired kidney function or kidney failure
- Frequent infections
- Constipation
- Numbness or tingling in extremities
- Easily bruising or bleeding
- Unexplained fever
- Breathing trouble

Treatment

Treatment options for multiple myeloma vary depending upon the type, severity, and stage of the disease, as well as the health, age, lifestyle, and quality of life goals of the patient. Anyone with multiple myeloma should consult a medical oncologist or hematologist about treatment. Care teams for multiple myeloma patients may include a medical oncologist, radiation oncologist, orthopedic surgeon, or bone marrow transplant specialist. Options can include surgery, chemotherapy, targeted therapies, immunotherapy, other drug therapy, radiation therapy, bisphosphonate therapy to reduce fracture risk, plasmapheresis, stem cell transplants, watchful waiting, and palliative care.

About Texas Oncology

Texas Oncology is an independent private practice with more than 500 physicians and 210 locations across the state. Meeting the oncology needs of Texans for more than 35 years, the practice includes Texas Center for Proton Therapy, Texas Breast Specialists, Texas Oncology Surgical Specialists, Texas Urology Specialists, and Texas Center for Interventional Surgery. As a lead participant in US Oncology Research, Texas Oncology played a role in the development of more than 100 FDA-approved therapies. For more information, visit www.TexasOncology.com.

Sources: American Cancer Society, American Society of Clinical Oncology, Multiple Myeloma Research Foundation, National Cancer Institute, and Texas Cancer Registry



