

A CLOSER LOOK AT Multiple Myeloma

Multiple myeloma is a progressive blood cancer that originates in the bone marrow. It occurs when specific types of white blood cells, called plasma cells, become cancerous and multiply uncontrollably, overcrowding the bone marrow.

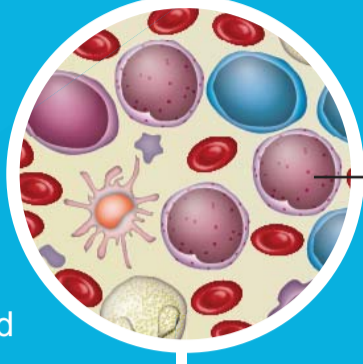


The immune system is the body's first line of defense

in recognizing and eliminating cancerous cells. In patients with multiple myeloma, the function of the immune system may decline over time.

Healthy Bone Marrow

Blood cells found in the bone marrow called Hematopoietic Stem Cells develop into all other types of blood cells in the body. A subset of white blood cells, called plasma cells, produce antibodies that usually aid the immune system to fight off invading organisms.



Plasma Cells

Bone

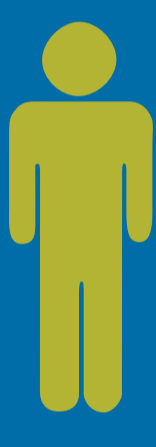
Myeloma Cells

Bone Marrow in Multiple Myeloma

In multiple myeloma, cancerous plasma cells grow uncontrollably and overcrowd the bone marrow. This affects the development of new, healthy blood cells, which leads to the decline of immune function, and can also lead to destruction of the bone.

114,250+

Global Yearly Estimated Incidence of Multiple Myeloma In Adults



62,450+ Male



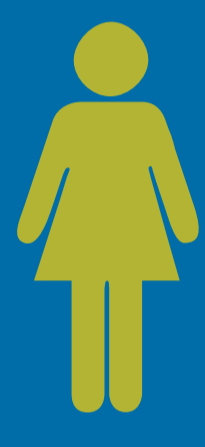
51,780+ Female

80,000+

Global Yearly Estimated Mortality for Multiple Myeloma In Adults



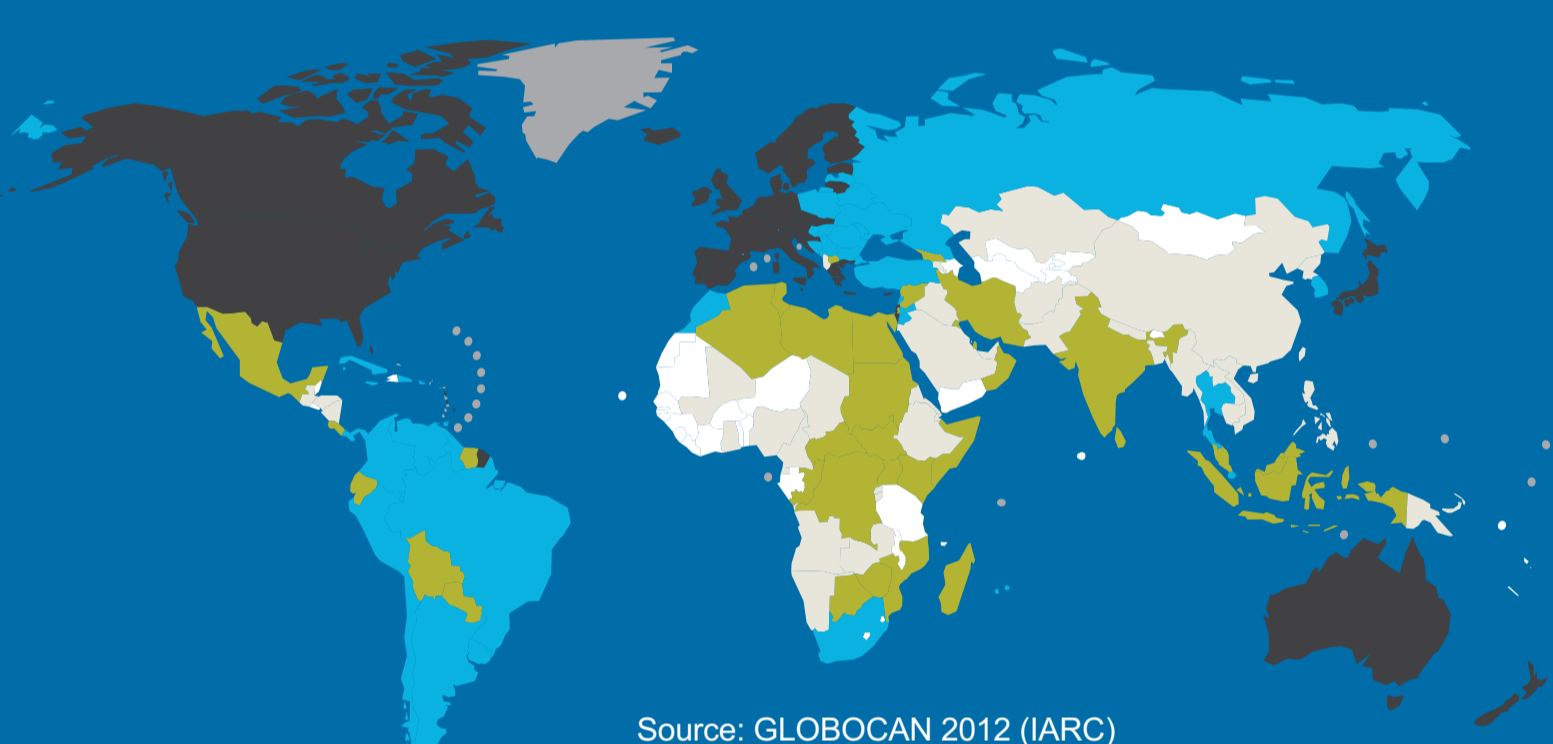
43,000+ Male



36,900+ Female

Global 1-Year Prevalence (per 100,000)

3.2+ 1.0-3.2 0.44-1.0 0.15-0.44 <0.15 No Data



Source: GLOBOCAN 2012 (IARC)

In the United States



Despite recent advances, multiple myeloma remains a largely incurable disease with **fewer than half of patients surviving five years after diagnosis.**

Relapse Is a Critical Issue



For some patients, the disease course of multiple myeloma is characterized by a pattern of remission and relapse. Some patients may relapse **several times** throughout the course of their disease.

Common Multiple Myeloma Signs and Symptoms:



Pain



Low Blood Counts



Kidney Problems



Nerve Damage



Bone Weakness and Fractures



High Blood Levels of Calcium



Infections



75%-80%

of patients experience bone pain as a serious side effect of multiple myeloma.

Current Treatments for Multiple Myeloma:



Chemotherapy



Radiation



Bisphosphonates



Surgery



Stem Cell Transplant

Multiple Myeloma Resources:

There are many resources to help patients and caregivers learn more about the disease and connect with others living with multiple myeloma.

American Cancer Society: www.cancer.org

American Society of Clinical Oncology: www.asco.org

Cancer Care: www.cancercares.org

Cancer Research Institute: www.cancerresearch.org

Cancer Support Community: www.cancersupportcommunity.org

International Myeloma Foundation: www.myeloma.org

Multiple Myeloma Research Foundation: www.themmr.org

