

MULTIPLE MYELOMA FACTS

UNITED STATES

WHAT IS MULTIPLE MYELOMA?

- Multiple myeloma is a life-threatening cancer of plasma cells, a type of white blood cell in the bone marrow that helps fight infection. When plasma cells become cancerous and multiply too quickly, they are called myeloma cells.¹
- The accumulation of these myeloma cells can form tumors in bones throughout the body.²
- Healthy bone marrow produces stem cells that develop into red blood cells that carry oxygen in the body, white blood cells that fight infection and disease, or platelets that help prevent bleeding by causing blood clots.²
- Health problems caused by multiple myeloma can affect the bones, immune system, kidneys and red blood cell count.³
- A relapse occurs when signs or symptoms of the disease return after a period of improvement. When a disease is refractory, it no longer responds to treatment.⁴

GLOBAL PREVALENCE AND INCIDENCE

GLOBALLY

Nearly
230,000*

people worldwide are living with multiple myeloma⁵

An estimated
114,000**

new cases are diagnosed annually⁵

80,000

people died in 2012⁵

ACCOUNTS FOR

2ND
most common
blood cancer⁴



About
12%
of all hematologic
cancers diagnosed⁵

*5-year prevalence **1-year incidence

IN THE U.S.

Approximately

95,875

people currently living with, or in remission from, multiple myeloma

24,050

number of people diagnosed with multiple myeloma in 2014

11,090

people lost their life to the disease in 2014⁶

10,000 TO 15,000

patients every year will either experience a relapse, or their disease will become refractory⁷

WHO'S AT RISK

65-74

AGE:
Most frequent in people 65-74¹



FAMILY HISTORY:
Having an immediate relative with multiple myeloma increases the risk four-fold⁸



GENDER:
Incidence is 1.5 times higher among men than women⁹



RADIATION:
Exposure to high doses of radiation, largely due to environmental factors⁸



RACE:
More common among people of African descent⁸



WEIGHT:
Carrying excess body weight⁸

SYMPTOMS

The exact cause of multiple myeloma is not known and symptoms often do not present in the early stages of the disease, making an early diagnosis very difficult.¹⁰ Symptoms of multiple myeloma may include, but are not limited to:¹¹



ABNORMAL BLEEDING



BONE AND/OR BACK PAIN



BONE FRACTURES INVOLVING THE SPINE, HIP BONES AND SKULL



LOW BLOOD COUNTS

DIAGNOSIS



Blood tests can determine if there is an abnormally high amount of protein, which can indicate multiple myeloma.¹⁰



A bone marrow biopsy and bone x-ray may also be used.¹²

TREATMENT

While there is no cure for multiple myeloma, treatment can help relieve pain, control complications of the disease, stabilize the condition and slow the progress of the disease. Treatments for multiple myeloma include:^{13,14}

- Chemotherapy and corticosteroids to kill myeloma cells
- Targeted therapies to block the growth of myeloma cells
- Bone marrow or stem cell transplantation to replace the diseased cells
- Bisphosphonates to reduce bone pain and fractures
- Radiation therapy to relieve bone pain or treat bone tumors

ADDITIONAL RESOURCES

For patients living with multiple myeloma, and their families, a number of valuable support resources are available in the U.S.:

- International Myeloma Foundation - www.myeloma.org
- Multiple Myeloma Research Foundation - www.themmr.org
- The Leukemia & Lymphoma Society - www.lls.org
- American Cancer Society - www.cancer.org
- American Society of Hematology - www.hematology.org/patients/
- Lymphoma Foundation of America - www.lymphomahelp.org
- Institute for Myeloma & Bone Cancer Research - www.imbcr.com
- Patients Against Lymphoma - www.lymphomation.org

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1. National Cancer Institute. SEER Stat Fact Sheets: Myeloma. Available at <http://seer.cancer.gov/statfacts/html/mulmy.html>. Accessed June 2014.
2. Cleveland Clinic. Diseases and Conditions. Available at http://my.clevelandclinic.org/health/diseases_conditions/hic_Multiple_Myeloma_and_Other_Plasma_Cell_Neoplasms_Treatment. Accessed March 2 2015.
3. Mayo Clinic. "Multiple Myeloma." Available at <http://www.mayoclinic.com/health/multiple-myeloma/DS00415>. Accessed February 2014.
4. Dimopoulos, MA, San-Miguel, JF, Anderson, KC. Emerging therapies for the treatment of relapsed or refractory multiple myeloma. *European Journal of Haematology*. 2011; Jan 86(1):1-15.
5. Ferlay J, et al. GLOBOCAN 2012 v1.0, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 11 [Internet]. Lyon, France: International Agency for Research on Cancer; 2013. Available from: <http://globocan.iarc.fr>, accessed on 15/January/2015.
6. Leukemia & Lymphoma Society. Facts 2014-2015. <http://www.lls.org/content/nationalcontent/resourcecenter/freeeducationmaterials/generalcancer/pdf/facts.pdf>
7. Data on file at Onyx Pharmaceuticals.
8. American Cancer Society "What are the risk factors for multiple myeloma?" Available at: <http://www.cancer.org/cancer/multiplemyeloma/detailedguide/multiple-myeloma-risk-factors>. Accessed February 2014.
9. Landgren, O, et al. (2006). Familial characteristics of autoimmune and hematologic disorders in 8,406 multiple myeloma patients: A population-based case-control study. *In. J. Cancer*, 118, 3095-3098.
10. American Cancer Society. "How is multiple myeloma found?" Available at: <http://www.cancer.org/cancer/multiplemyeloma/overviewguide/multiple-myeloma-overview-diagnosed>. Accessed February 2014.
11. American Cancer Society. "Signs and symptoms of multiple myeloma" Available at: <http://www.cancer.org/cancer/multiplemyeloma/overviewguide/multiple-myeloma-overview-signs-symptoms>. Accessed February 2014.
12. Mayo Clinic. "Multiple myeloma: Tests and diagnosis." Available at: <http://www.mayoclinic.org/diseases-conditions/multiple-myeloma/basics/tests-diagnosis/con-20026607?footprints=mine>. Accessed July 2013.
13. Mayo Clinic. "Multiple Myeloma: Treatments and drugs." Available at: <http://www.mayoclinic.org/diseases-conditions/multiple-myeloma/basics/treatment/con-20026607>. Accessed February 2014.
14. American Cancer Society. "How is Multiple Myeloma Treated?" Available at <http://www.cancer.org/cancer/multiplemyeloma/detailedguide/multiple-myeloma-treating-general-info>. Accessed July 2014.