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.\(^3\)
- 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 myeloma\(^2\)
- An estimated 114,000** new cases are diagnosed annually\(^3\)
- 80,000 people died in 2012\(^5\)

ACCOUNTS FOR

- 2ND most common blood cancer\(^4\)
- About 12% of all hematologic cancers diagnosed\(^3\)

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 2014\(^6\)
- 10,000 TO 15,000 patients every year will either experience a relapse, or their disease will become refractory\(^7\)

WHO’S AT RISK

- 65-74
- AGE: Most frequent in people 65-74\(^1\)
- FAMILY HISTORY: Having an immediate relative with multiple myeloma increases the risk four-fold\(^8\)
- GENDER: Incidence is 1.5 times higher among men than women\(^9\)
- RADIATION: Exposure to high doses of radiation, largely due to environmental factors\(^8\)
- RACE: More common among people of African descent\(^8\)
- WEIGHT: Carrying excess body weight\(^8\)
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.\textsuperscript{10} Symptoms of multiple myeloma may include, but are not limited to:\textsuperscript{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.\textsuperscript{10} A bone marrow biopsy and bone x-ray may also be used.\textsuperscript{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:\textsuperscript{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.themmrf.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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7. Data on file at Onyx Pharmaceuticals.