

## Understanding Your Diagnosis

### What happens if multiple myeloma comes back?

Some people living with multiple myeloma face a difficult reality as they look ahead. The disease is incurable, and though they may experience periods of remission, a relapse can occur.

A relapse is multiple myeloma that has come back after treatment. Their multiple myeloma may also become refractory (not respond to treatment).

**A relapse can feature both physical and emotional effects. Signs of a relapse can include:**

- Return of symptoms
- Changes in blood cell counts
- Problems with organs
- Evidence of cancer growth

At the same time, knowing that a relapse may occur or that the cancer may not respond to treatment, a person may experience fear, anxiety, and other negative feelings that weigh heavily on them and those who are close to them.

Finding and connecting, or reconnecting, with sources of support is another important way to take care of yourself at this time.

### Questions about multiple myeloma?

The GSK Response Center is here to help.



1-888-825-5249



[www.contactus.gsk.com](http://www.contactus.gsk.com)

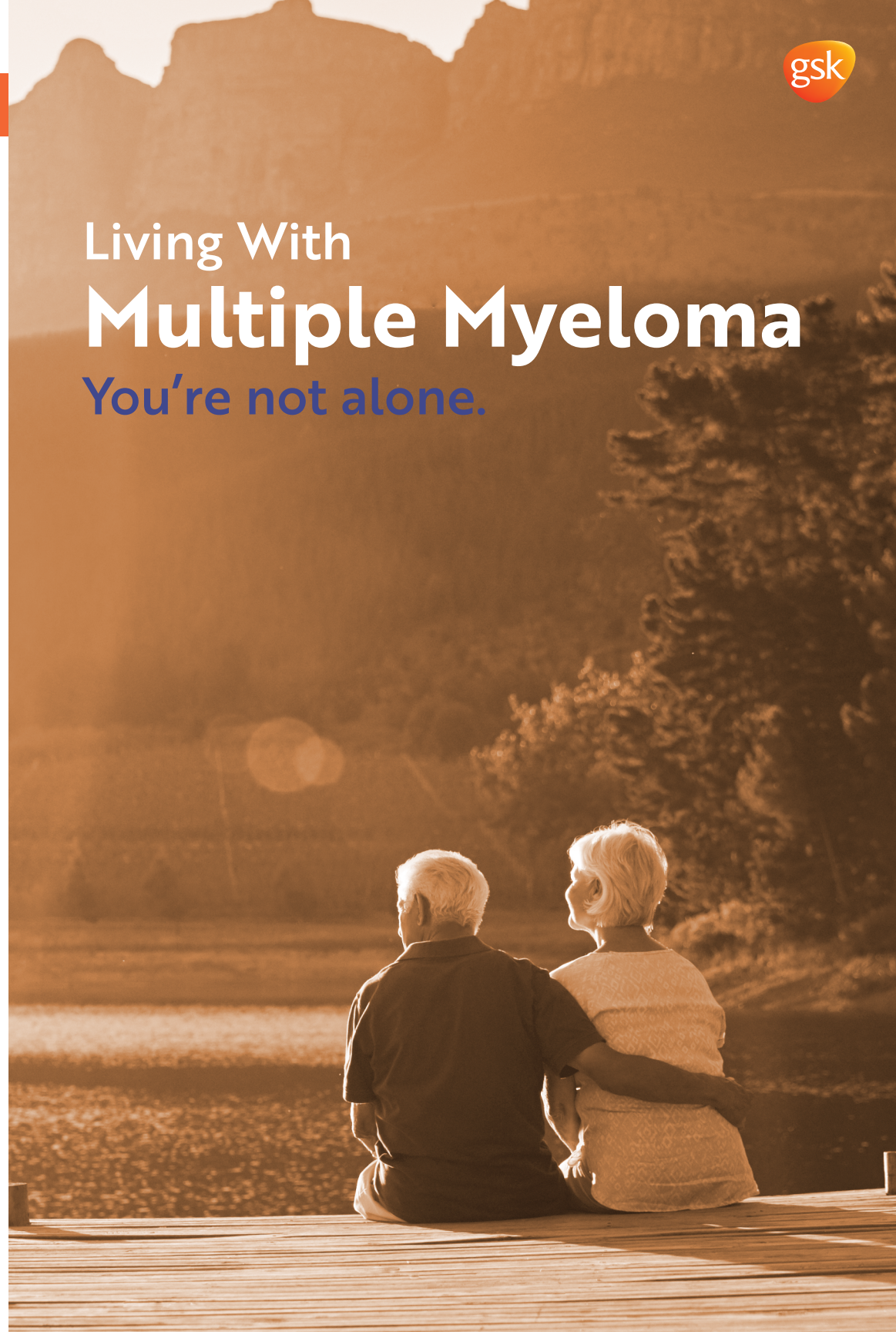
Trademarks are owned by or licensed to the GSK group of companies.



©2021 GSK or licensor.  
BLMBROC210008 August 2021  
Produced in USA. 0002-0014-01



Living With  
**Multiple Myeloma**  
You're not alone.





## About Multiple Myeloma

### What is multiple myeloma?

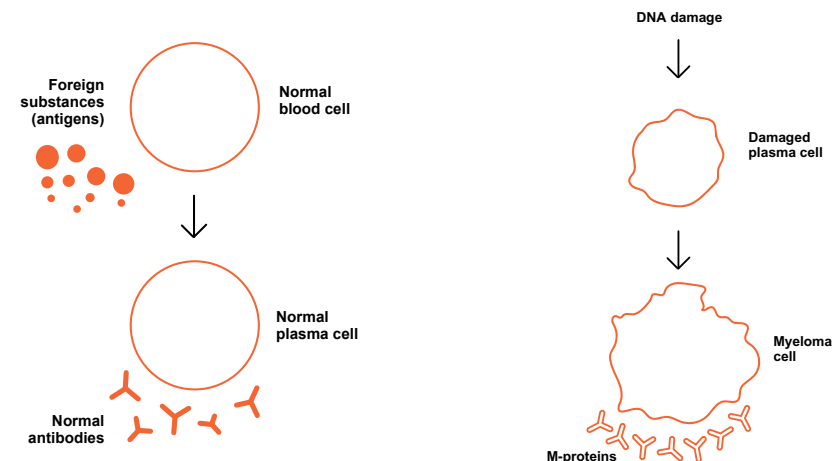
Multiple myeloma is a type of blood cancer that affects the immune system and starts in specific white blood cells called plasma cells. Plasma cells are found mostly in bone marrow and are an important part of the immune system because they produce a number of antibodies that our bodies use to fight infection.

### What is the cause of multiple myeloma?

Damage to the DNA can turn plasma cells into cancerous cells known as myeloma cells. Over a period of time, these myeloma cells multiply and spread through the bone marrow. Instead of producing normal antibodies, they produce large numbers of a single antibody referred to as monoclonal proteins or M-proteins. However, this antibody is dysfunctional in the human body.

Facing multiple myeloma isn't something you have to handle on your own. It's important to your overall well-being to find support as you deal with physical symptoms, as well as thoughts and feelings that may be difficult. It may help to know there are others who understand what you're experiencing, because they're living with it too.

You also have medical professionals in your corner. A large number of hematologists specialize in multiple myeloma, and the number of pharmaceutical companies researching this type of cancer has grown in recent years. This should encourage and remind you that you are not alone on this journey.



The actual cause of multiple myeloma is not yet fully understood. Today, it is thought that environmental factors and changes in genetic material play a role.

## About Multiple Myeloma

### How common is multiple myeloma?

3<sup>rd</sup>

Most  
Common

Multiple myeloma is the third most common type of blood cancer in the United States. There are approximately 180,000 people living with this illness.

### Who gets multiple myeloma?

- It is normally diagnosed at an advanced age (over 65 years)
- Men are more likely than women to get multiple myeloma
- People of African-American descent have twice the risk due to recently identified cytogenetic differences

### Are there treatments for multiple myeloma?

YES

The good news is that tremendous advances have been made in the diagnosis and treatment of multiple myeloma in recent years. Over the last 20 years, intensive research has led to the development of several new types of medication.

Ten years ago, there were only 3 innovative active substances available for treating multiple myeloma. Today, more than double this number are available.

The percentage of people who survive for 5 years or longer has nearly doubled since 1990.

### What are the signs and symptoms of multiple myeloma?

Patients with multiple myeloma may experience a number of different signs and symptoms that can vary greatly from person to person. At the time of diagnosis, most patients may already have experienced some level of bone pain.

**Your doctor may suspect you have multiple myeloma based on medical history and signs and symptoms such as:**



Pain



Infections



Fatigue



Easy bruising  
or bleeding



Kidney  
failure





## Understanding Your Diagnosis

### How is multiple myeloma diagnosed?

Multiple myeloma can cause a range of different common symptoms. Some of these symptoms, such as fatigue and bone pain, are similar to symptoms of other illnesses. Your doctor will need to do specific tests before making a diagnosis.

In order to diagnose multiple myeloma with certainty or to rule it out, your doctor will ask questions about your symptoms and may run a variety of blood and/or urine tests, imaging scans, and genetic tests.

The results of these tests will not only determine whether you have the disease, but also the extent of the disease, type of myeloma, what treatment options may be helpful, and how to monitor the effects of treatment.

#### Your doctor will evaluate the results of your laboratory tests—more specifically:

- Level of M-proteins (abnormal proteins produced by myeloma cells)
- Number of myeloma cells in a bone marrow sample (also called tumor burden)
- Presence, extent, and characteristics of bone damage
- Any cytogenetic (genomic) abnormalities

You and your doctor will evaluate other health factors such as your age, symptoms, general health, and lifestyle. Discuss treatment options with your doctor. Options may include stem cell transplant, chemotherapy, other medications, or a clinical trial.

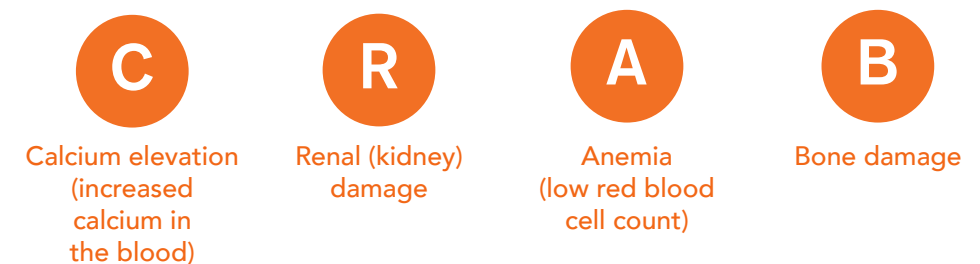
While there is no cure for multiple myeloma at this time, people may be able to manage their symptoms through treatment and guidance from their healthcare provider.

Managing multiple myeloma can differ from person to person. Together, you and your doctor will figure out the best treatment plan for you.

### If I'm diagnosed, when will I start treatment?

If you are diagnosed with multiple myeloma, your doctor will sit down with you to decide which is the most suitable course of treatment for you. The decision on whether treatment should start immediately depends on the results of a bone marrow examination, imaging and blood tests, and whether at least one of the so-called CRAB criteria is met.

#### CRAB criteria for deciding if treatment should be started:



The CRAB criteria are usually met if your multiple myeloma is already causing symptoms. If this is the case, your doctor will start treatment immediately.

#### Other factors that can influence the type of therapy you receive include:

- Other medical conditions you might have
- Your personal preference with regard to a particular treatment
- The stage of your multiple myeloma

## Understanding Your Diagnosis

### What is high-dose chemotherapy with an autologous stem cell transplant?

Multiple myeloma can often be suppressed for an extended period of time using high-dose chemotherapy followed by an autologous stem cell transplant. High-dose chemotherapy aims to destroy as many myeloma cells as possible.

Because the chemotherapy also destroys healthy bone marrow cells, the patient subsequently receives an infusion of healthy bone marrow cells that were removed from their blood on a previous occasion. This process is referred to as an autologous stem cell transplant. It is called “autologous” because the patient receives an infusion of their own healthy bone marrow cells.

Stem cell transplant may not be an option for every patient and might be more suitable for younger and fitter patients up to the age of about 65 years, because they often tolerate the side effects better than older patients.

### What if a stem cell transplant is not possible?

If high-dose chemotherapy with a stem cell transplant is not possible in your case, other medications are currently available. Most patients with multiple myeloma will receive multiple types of treatment that may include:

- Chemotherapy
- Antibody therapy
- Immunomodulators to help your immune system find and fight cancer
- Proteasome inhibitors that act on specific features of the myeloma cell
- Steroids

These treatments for multiple myeloma work in different ways and combination therapies are common.

### How will I know if I'm responding to treatment?

Regular doctor visits are necessary during the course of treatment. Your doctor will assess during the check-ups whether and to what degree you are responding to the treatment. Many of the examinations for the assessment are the same as those during the diagnosis. This includes regular blood and urine tests. Imaging tests and bone marrow examinations are sometimes also necessary.

#### Signs that you are responding to the treatment:

- Reduced amount of M-proteins in your blood
- Improvement of your symptoms and possible complications (CRAB criteria, see page 7)
- Fewer myeloma cells in your bone marrow
- Improvement in your overall state of health

Not all patients respond to a treatment in the same way. Some patients respond such that there is no detectable disease left, and some patients linger with continued but stable disease.

Some patients don't respond at all to the treatments they're given. This is called **refractory multiple myeloma**. Some patients stop responding after an initial and prolonged positive response. This is referred to as **relapsed multiple myeloma**.

In the case of relapsed or refractory multiple myeloma, your doctor will suggest another course of treatment and may ask whether you can participate in a clinical trial.

