

UNDERSTANDING MGUS

A brief guide for patients with monoclonal gammopathy of undetermined significance

MGUS is **not cancer**. It is a condition in which a small group of plasma cells makes a measurable protein in the blood. Most people with MGUS feel well, and most never develop a serious blood disorder from it. Regular check-ins with your doctor help ensure that any changes are caught early and that monitoring keeps you safe.

What are plasma cells?

Plasma cells are white blood cells that make antibodies, which help protect you from infections. When one group of plasma cells malfunctions and begins making only one type of antibody, the resulting monoclonal protein is what appears on blood tests in MGUS.

What is MGUS?

MGUS occurs when a small population of plasma cells produces a monoclonal protein (M-protein). The protein itself is **not harmful**, and the condition often stays stable for many years. MGUS is common, especially as people age, and is often discovered by accident during routine blood work.

Common causes

MGUS does not have one specific cause. Factors that may contribute include:

- **age-related change** in plasma cells
- **chronic immune stimulation**, such as repeated infections or chronic inflammation
- possible **genetic factors**

There is **no known lifestyle factor** that causes MGUS.

Does it cause symptoms?

MGUS itself typically causes no symptoms. If symptoms do occur, they are usually caused by another condition. If MGUS ever progresses, symptoms would relate to the new disorder rather than to MGUS itself.

Is it dangerous?

MGUS carries a **low average risk of progression**—about 1 in 100 people per year. Most people never progress, and when changes happen, they usually develop slowly over many years or decades. For example, someone diagnosed at age 60 may never progress by age 80 or beyond.

How your doctor evaluates it

Your doctor evaluates MGUS with blood tests that measure:

- **M-protein level**
- **light chain ratio**
- **kidney function**
- **calcium**
- **blood counts**

For most people, these blood tests are the main tool. A bone marrow biopsy is usually not needed unless something changes or the initial results are concerning.

Do I need a bone marrow biopsy?

A bone marrow biopsy is **not routinely needed** for MGUS. It is recommended only if blood tests raise specific concerns—such as a higher-risk protein pattern—or if symptoms suggest a condition beyond MGUS.

What Is the treatment?

MGUS does not require treatment because the abnormal plasma cells are not actively causing harm. Treatment begins only if progression occurs, such as the development of myeloma-related changes. Many people live their entire lives with stable MGUS and no need for therapy.

When should I contact my doctor?

Contact your doctor sooner than planned if you notice new bone pain, unexplained fatigue, repeated infections, new numbness or tingling, or changes in kidney tests or other lab results that seem abnormal. These symptoms do not necessarily mean progression but should be evaluated.

What is the usual plan going forward?

Most people with MGUS are seen once or twice per year. Your doctor will focus on monitoring your blood tests, checking for stability over time, and adjusting visit frequency if anything changes. Regular follow-up is the key to staying safe.

Key points to remember

- **MGUS is not cancer and often remains stable for life.**
- **risk of progression is low**, usually about 1 in 100 people each year.
- **monitoring keeps you safe** by detecting changes early if they occur.
- **call if symptoms change** or you develop new concerns.