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About Waldenstrom Macroglobulinemia

Overview and Types

If you have been diagnosed with Waldenstrom macroglobulinemia or are worried about it, you likely have a lot of questions. Learning some basics is a good place to start.

- [What Is Waldenstrom Macroglobulinemia?](#)

Research and Statistics

See the latest estimates for new cases of Waldenstrom macroglobulinemia in the US and what research is currently being done.

- [Key Statistics About Waldenstrom Macroglobulinemia](#)
- [What's New in Waldenstrom Macroglobulinemia Research?](#)

What Is Waldenstrom Macroglobulinemia?

Waldenstrom macroglobulinemia (WM) is a type of [non-Hodgkin lymphoma](#)¹ (NHL). The cancer cells make large amounts of an abnormal protein (called a **macroglobulin**). Another name for WM is **lymphoplasmacytic lymphoma**. This condition used to be called Waldenstrom's macroglobulinemia, so some people refer to it as Waldenstrom's.

To understand WM, it helps to know about the functions of lymphoid tissue in the body.

Lymphoid tissue and the immune system

Lymphoid tissue is made up several types of immune system cells that work together to help the body resist infections. Lymphoid tissue is found in many places in the body:

- Lymph nodes, which are pea-sized collections of immune system cells throughout the body, including in the underarm area, in the groin, on the sides of the neck, and inside the chest and abdomen
- Bone marrow, the soft inner part of certain bones where new blood cells are made
- The thymus, a small organ behind the chest bone and in front of the heart
- The spleen, an organ on the left side of the abdomen next to the stomach
- The tonsils and adenoids in the throat
- Throughout body systems like the digestive system and respiratory system

Lymphocytes (lymph cells) are the main cells of lymphoid tissue. The 2 main types of lymphocytes are:

- **B lymphocytes (B cells)** respond to an infection by changing into a different type of cell called a **plasma cell**. Plasma cells make proteins called antibodies (also called immunoglobulins) that help the body attack and kill disease-causing germs like bacteria.
- **T lymphocytes (T cells)** help direct immune responses, but they also can kill invading germs directly.

Waldenstrom macroglobulinemia

WM is a cancer that starts in B cells. The cancer cells in people with WM are similar to those of 2 other types of cancer: [multiple myeloma](#)² and [non-Hodgkin lymphoma](#)³.

Multiple myeloma is considered a cancer of plasma cells, and non-Hodgkin lymphoma is a cancer of lymphocytes. WM cells have features of both plasma cells and lymphocytes and are called lymphoplasmacytoid.

WM cells make large amounts of a certain type of antibody (immunoglobulin M, or IgM), which is known as a **macroglobulin**. Each antibody (protein) made by the WM cells is the same, so it is called a **monoclonal protein**, or just an **M protein**. The buildup of this M protein in the body can lead to many of the symptoms of WM, including excess

Key Statistics About Waldenstrom Macroglobulinemia

Waldenstrom macroglobulinemia (WM) is rare, with an incidence rate of about 3 cases per million people per year in the United States. About 1,000 to 1,500 people are diagnosed with WM each year in the United States.

WM is more common in men than it is in women , and it is much more common among White people than Black people.

There are few cases of WM in younger people, but the chance of developing this disease goes up as people get older. The average age of people when they are diagnosed with WM is 70 .

Statistics on survival are discussed in [Survival Rates for Waldenstrom Macroglobulinemia](#)¹.

Hyperlinks

1. www.cancer.org/cancer/waldenstrom-macroglobulinemia/detection-diagnosis-staging/survival-rates.html

References

Castillo JJ. Plasma cell disorders. *Prim Care*. 2016; 43:667-691. doi: 10.1016/j.pop.2016.07.002. Epub 2016 Oct 14.

Castillo JJ, Olszewski AJ, Kanan S, Meid K, Hunter ZR, Treon SP. Overall survival and competing risks of death in patients with Waldenström macroglobulinaemia: an analysis of the Surveillance, Epidemiology and End Results database.

Lymphoma. 2012;53:1625–1626.

- oprozomib
- Histone deacetylase (HDAC) inhibitors, such as panobinostat (Farydak), romidepsin (Istodax), and belinostat (Beleodaq)
- Bruton tyrosine kinase (BTK) inhibitors, such as acalabrutinib (Calquence) and spebrutinib
- PI3K inhibitors, such as idelalisib (Zydelig) and buparlisib (BKM120)
- Aurora kinase inhibitors, such as alisertib
- BCL-2 inhibitors, such as venetoclax (Venclexta)
- CXCR4 antibodies, such as ulocuplumab

Bone marrow and peripheral blood stem cell transplant

Researchers are continually improving [bone marrow and peripheral blood stem cell transplant methods](#)⁵, as well as trying to determine how helpful this type of treatment can be for people with WM.

Vaccines

Doctors know it is possible for people with cancer to develop immune responses to their cancer. In rare instances, people's immune systems have rejected their cancers, and they have been cured. Scientists are now studying ways to boost this immune reaction by using vaccines.

Unlike vaccines used to prevent infections, these vaccines create an immune reaction against the lymphoma cells in patients who have very early disease or whose disease is in remission but could come back or relapse. This is a major area of research in treating lymphomas (including WM), but it is still being tested in clinical trials. You might want to consider enrolling in one of these studies.

Hyperlinks

1. www.cancer.org/cancer/waldenstrom-macroglobulinemia/causes-risks-prevention/what-causes.html
2. www.cancer.org/cancer/waldenstrom-macroglobulinemia/causes-risks-prevention/prevention.html
3. www.cancer.org/cancer/waldenstrom-macroglobulinemia/treating.html
4. www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html
5. www.cancer.org/cancer/waldenstrom-macroglobulinemia/treating/stem-cell-

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