

Waldenstrom's Macroglobulinemia

Essential Information:
A Patient's Guide



International Waldenstrom's
Macroglobulinemia Foundation

In partnership with:





Waldenstrom's Macroglobulinemia

Essential Information: A Patient's Guide

Stephen M. Ansell, MD, PhD

Dorotha W. and Grant L. Sundquist Professor in Hematologic Malignancies Research, Mayo Clinic
Professor of Medicine, Mayo Clinic College of Medicine

Carl Harrington

IWWMF President Emeritus
Chair, Global Patient Initiative

Steven Treon, MD, PhD

Director, Bing Center for Waldenstrom's Macroglobulinemia, Dana-Farber Cancer Institute
Professor of Medicine, Harvard Medical School

This publication is supported by:



Medical Disclaimer: The information presented here is intended for educational purposes only. It is not meant to be a substitute for professional medical advice. Patients should use the information provided in full consultation with, and under the care of a physician with experience in the treatment of WM. We discourage the use by a patient of any information contained herein without disclosure to his or her medical specialist.

© 2023 International Waldenstrom's Macroglobulinemia Foundation

Essential Information: A Patient's Guide

1. What is Waldenstrom's macroglobulinemia (WM)?

- WM is a type of blood cancer where too much of a specific abnormal protein - an antibody (or immunoglobulin) called IgM - is produced. IgM is the largest of all the antibodies, called a macroglobulin. Generally, IgM is a "first responder" to infections. The abnormal IgM protein is normally not present in healthy people and is also called a M-protein or paraprotein.
- In the case of WM, the abnormal WM cells do not undergo programmed cell death. Instead, they accumulate in the bone marrow. This can crowd out normal bone marrow cells that make new red blood cells leading to anemia and crowd out production of other cells that protect us from infection.
- These abnormal WM cells can also grow outside the bone marrow and cause enlargement of the lymph nodes and spleen, or proliferate in the lung space, brain, or spine.
- The WM cells and the excess IgM can damage cells and organs in the body causing symptoms, such as fatigue, numbness, tingling, and weakness.
- The excess IgM also circulates in the blood. Because of IgM's large size, the blood can become very thick, a condition known as hyperviscosity. This can lead to blood vessels bursting, causing bleeding in the retina or brain. IgM can also deposit in organs like the kidney and affect its function.
- Some patients with WM can have symptoms that are directly related to the IgM protein itself such as amyloidosis, cryoglobulinemia, cold agglutinin hemolytic anemia, and demyelinating peripheral neuropathy. These are rare. More information can be found on the IWMF website: iwmf.com.

2. WM is a rare, currently incurable, but treatable blood cancer.

- WM is usually an indolent, slow-growing cancer, and many patients do not require treatment but only periodic blood tests. Most people with WM requiring treatment have time to consider their treatment options.

3. How rare is WM? What is the incidence of WM?

- There are about 1,500-3,000 new cases of WM per year in the US and 1,500-3,000 per year in Europe. Overall, WM comprises only 1-2% of all blood cancers.
- This rarity means that most community oncologists see few, if any, WM cases in their career.

4. How is WM diagnosed?

- In addition to blood tests, a bone marrow biopsy is essential for diagnosis.
- About 90-95% of people with WM have the same genetic mutation in a gene that encodes a protein called MYD88 while 30-40% have a genetic mutation in the CXCR4 gene. Some CXCR4 mutations affect the effectiveness of different treatments.

5. Why did I get WM? Will my kids get it?

- The cause of WM is unknown. However, the genetic mutations associated with WM (MYD88 and CXCR4) are acquired during your lifetime and are not passed down from your parents to you, or from you to your children.
- Up to 25% of people with WM do have a first-degree (parent, sibling, or child) or second-degree relative (grandparent, aunt, uncle, cousin) with WM or another B-cell lymphoma.
- A small number of WM families exist where both parents and children as well as siblings have WM.
- In cases of “familial” WM, a reasonable step would be to perform blood tests to check blood cell numbers and test for an abnormal protein by doing serum protein electrophoresis. Your primary care physician can consider ordering these blood tests for offspring who are 40 years of age or older, given the late onset of WM.

6. WM usually occurs in stages. Will I go through all the stages?

- It often starts with a diagnosis of MGUS (monoclonal gammopathy of undetermined significance) which, most commonly, is a precursor to WM. From there, some people progress to asymptomatic (or smoldering) WM. It is only when someone progresses to symptomatic WM that treatment is needed.
- Not everyone progresses through these stages. In fact, most patients with MGUS do not progress to symptomatic WM. One could remain in the MGUS or the asymptomatic stage forever.

7. When do I need treatment?

- Usually, treatment is needed when a person has symptoms related to either low blood counts and high tumor load - like fatigue or bleeding - or when elevated IgM levels cause symptomatic hyperviscosity, or damage cells or organs.
- The course of WM can vary significantly from person to person. For example, some people are symptomatic with a low level of IgM while others do fine with a high level. Therefore, physicians generally treat people based on their symptoms. Only when IgM levels are becoming very high, your physician might decide to start treatment to reduce the risk of developing hyperviscosity.



8. Should I get a second opinion?

- Since WM is a rare disease, it's recommended that you try to get a second opinion from a physician listed in the IWMF International Physician's Directory. Discuss getting a second opinion with your medical team.

9. What are my treatment options?

- The good news is these days there are many treatment options. In the past there were only a few, often with significant side effects.
- Treatment roughly falls into two categories: Oral medication(s) that you may take indefinitely, or an infusion treatment you take for a limited time. Your medical team will help you decide the best option for you.
- Rituximab is a medication used to treat many blood cancers, including WM. Unfortunately, it sometimes causes a short-term rise in IgM levels - called an IgM flare - that could be dangerous. Some people require a medical procedure called plasmapheresis to reduce their IgM level on a short-term basis before starting therapy with rituximab. Alternatively, rituximab may be started later in the treatment regimen.
- Make sure you tell your medical team about any side effects that you experience following treatment. There are often strategies that can be employed to reduce their impact.

10. What if my WM comes back?

- WM may come back or progress after an initial treatment, despite a long period of remission after chemotherapy treatment or being on continuous therapy. If the initial treatment was successful for several years, your doctor may repeat it or recommend a new treatment. In many patients, direct treatment is not needed immediately because the relapse is asymptomatic, and the patient can be followed with regular controls. Discuss options with your medical team.

11. How long am I going to live?

- The life span of people with WM has increased dramatically in recent years. In the past, many patients were told they had 3-5 years to live after diagnosis.
- It is now much longer, with some WM thought leaders saying 15-20 years on average from the date of diagnosis. In fact, many patients' cause of death is unrelated to their WM. What's most important is that the time frame has increased dramatically and is continuing to increase with newer, safer, and more effective drugs.



12. Where can I get help?

Contact the IWMF:

International Waldenstrom's Macroglobulinemia Foundation

iwmf.com

Phone: 941-927-4963

International: 001-941-927-4963

The IWMF, the only international organization dedicated solely to Waldenstrom's macroglobulinemia, is a patient-founded and patient-driven nonprofit with a simple but compelling vision and mission.

OUR VISION: A world without WM (Waldenstrom's macroglobulinemia).

OUR MISSION: Support and educate everyone affected by Waldenstrom's macroglobulinemia (WM) to improve patient outcomes while advancing the search for a cure.

The IWMF is committed to creating a world without WM by finding a cure. Since 1999, the IWMF has invested over \$21 million in WM research projects throughout the world. Thanks to this research, WM patients are living longer, and have better treatment options that can lead to longer-lasting remissions, with fewer side effects.

Visit the IWMF website to:

- Download a free Newly Diagnosed Info Pak.
- Download free publications about WM written in a clear, easy-to-understand style and available in multiple languages.
- Join a local IWMF Support Group or global affiliate.
- Join IWMF Connect, an online community offering a wide variety of moderated WM-related email discussions, or IWMF Facebook.
- Attend the annual IWMF Educational Forum or our online webinars.
- Subscribe to the IWMF Torch, our free quarterly newsletter.
- Contact an IWMF affiliate at iwmf.com/international-affiliates/
- Contact an IWMF partner: iwmf.com/partners/
- Work with your medical team to contact the IWMF Directory of Physicians for a second opinion: iwmf.com/directory-of-wm-physicians/

WM is a rare disease, but with the IWMF you are never alone.



International Waldenstrom's
Macroglobulinemia Foundation

6144 Clark Center Avenue, Sarasota, FL 34238

Phone: 941-927-4963

International: 001-941-927-4963

iwmf.com