

Diffuse Large
B-Cell Lymphoma
DLBCL



WHAT YOU NEED TO KNOW

You or your loved one has been diagnosed with diffuse large B-cell lymphoma (DLBCL). What does it mean and how will it affect you?

This fact sheet will help you:

Learn about
DLBCL and how
it is diagnosed

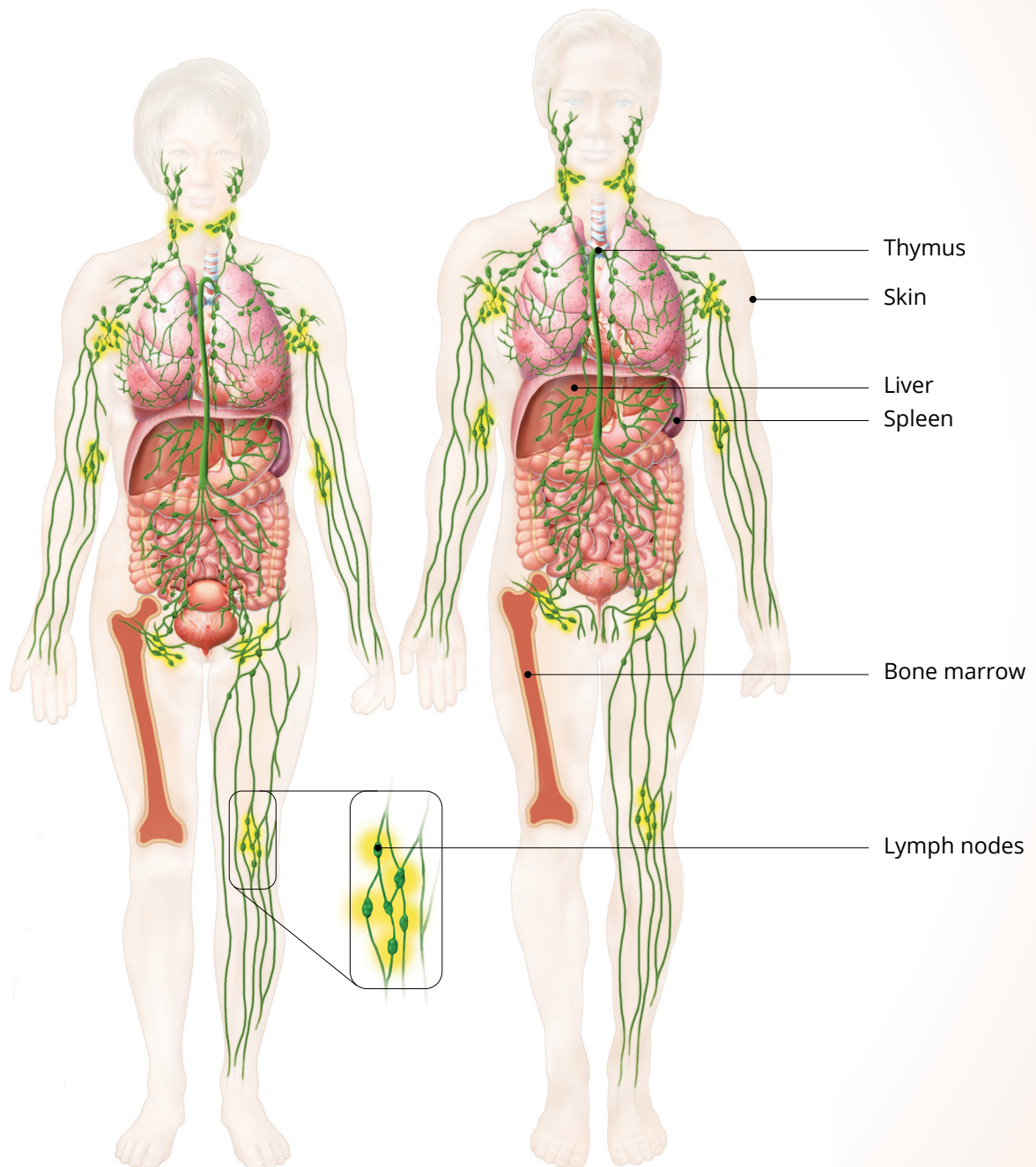
Get an overview
of treatment
options

Understand
what happens
next

About lymphoma

Lymphoma is cancer of the lymphatic system, which includes the bone marrow, lymph nodes, thymus, liver, skin, and spleen.

Your lymphatic system defends your body against infection by creating white blood cells called **lymphocytes**. If these cells become abnormal, you may develop lymphoma.



What is lymphoma?

Lymphoma is the name of a group of blood cancers that develop in your lymphatic system. The two main types are Hodgkin lymphoma (HL) and non-Hodgkin lymphoma (NHL). DLBCL is a subtype of NHL.

About DLBCL

- DLBCL is the most common subtype of NHL
- It is fast-growing (aggressive) but treatable
- If not treated, it is fatal
- It most often appears in older adults but can appear at any age
- DLBCL typically has no known cause

Symptoms of DLBCL

With DLBCL, you often have swelling in the lymph nodes or lumps that grow quickly and may appear in one or more areas of the body. You may have general symptoms like fever, weight loss, or night sweats.

You may experience:

- Pain in the abdomen
 - If the DLBCL is in the stomach or bowel
- Cough or chest pain
 - When the DLBCL is in the chest
- Itchy skin, rash, or skin lumps
 - This is a response from your immune system

Your diagnosis

With a diagnosis, your doctor can determine the right treatment for you. Your test results help your doctor predict how DLBCL will likely progress and how you may respond to treatment.

Here are some possible tests you may undergo:

Name of test	Description
Medical history and physical exam	The doctor will review past illnesses, injuries, and symptoms and will examine your lungs, heart, and other organs.
Blood tests	Blood tests check for other possible health issues, assess how well organs are working, monitor blood cell counts, and help track treatment progress.
Lymph node biopsy	A lymph node core biopsy takes a small tissue sample from the swollen lymph node.

Name of test	Description
Genetic analysis	This test checks for specific genetic changes in the lymphoma cells, which can help doctors understand how aggressive the lymphoma is.
Immunophenotyping and flow cytometry	These tests check the proteins on lymphoma cells, helping doctors identify the type of lymphoma.
Heart function test	An echocardiogram (echo) is needed before starting treatment to check how well the heart is working. Some lymphoma treatments can affect heart health.
Imaging tests (CT and PET)	Imaging scans are done to see where the lymphoma is located in the body, referred to as staging. This provides a baseline for doctors to assess how well the treatment is working later on.
Bone marrow biopsy	This test may be needed to check if the lymphoma has spread to the bone marrow or to help explain the cause of low blood cell counts.

Stages of DLBCL

Identifying the stage of the disease is an important step in planning your treatment. The stage of lymphoma refers to where the disease is located and how much of it is in your body.

Stages I and II (1 and 2) are early stages. Stages III and IV (3 and 4) are advanced.

Stages

Stage I	The lymphoma is in one group of lymph nodes or one extranodal site (outside the lymph nodes)
Stage II	The lymphoma is in two or more groups of lymph nodes on the same side of your diaphragm
Stage III	The lymphoma is in lymph nodes above and below the diaphragm
Stage IV	The lymphoma is found in many areas of the body (in the lymph nodes and beyond)



Clinical trials are research studies that aim to improve the care and treatment of people living with cancer.

For some people with a blood cancer, a clinical trial may be the best treatment choice. Talk to your healthcare team for more information.

Treatment of newly diagnosed DLBCL

The treatment for DLBCL typically involves chemotherapy combined with immunotherapy drugs called monoclonal antibodies. The main goal is remission, which means getting rid of the lymphoma. Treatment plans are personalized based on factors like the stage of the disease, your overall health, and specific characteristics of the DLBCL.

Regular follow-up care during treatment is important to monitor progress and adjust treatment if needed. With modern treatments, many people with DLBCL can achieve remission and cure.

Types of treatment

Common DLBCL treatments and possible side effects include:

Traditional chemotherapy

Uses medicine (chemicals) to kill lymphoma cells. It also affects your body's healthy, fast-growing cells (such as hair, nails, and blood cells). It is often given in combination with immunotherapy.

- **Potential side effects:** low blood cell counts (white, red, and platelets), infection, bleeding, anemia, nausea, diarrhea, vomiting, loss of appetite, brain fog (chemo brain), fatigue, shortness of breath, diseases or disorders affecting the heart (cardiopathy), temporary hair loss, mouth sores, rashes, secondary cancers, and nerve damage (neuropathy)

Immunotherapy

For DLBCL treatment, monoclonal antibodies are combined with chemotherapy to target a protein found on the surface of lymphoma cells. This helps the body's immune system recognize and destroy the cancer.

- **Potential side effects:** allergic reactions, such as fever, chills, or rash, especially during the first infusion, low blood cell counts, and an increased risk of infection

Radiation therapy

Uses high-energy X-rays or other types of radiation to kill cancer cells. Radiation may be combined with systemic therapy at the end of treatment.

- **Potential side effects:** redness, dryness, itching, blistering, nausea, diarrhea, vomiting, loss of appetite, headaches, swelling, fatigue, shortness of breath, cardiopathy, temporary hair loss, and secondary cancers

Further treatment if needed

If the DLBCL returns (relapse) or does not respond (refractory), treatments may include:

Stem cell transplant (SCT)

Uses healthy stem cells to replace those damaged by cancer or intense chemotherapy and radiation treatments. Your body relies on stem cells to produce blood cells.

- **Autologous:** The stem cells come from your body. This allows you to receive high doses of chemotherapy. Using your own stem cells helps your bone marrow produce new blood cells and reset your immune system.
 - **Potential side effects:** low blood cell counts (white, red, and platelets), infection, bleeding, anemia, pain and issues with the digestive system, skin and hair problems, and issues with the kidneys, lungs, heart, eyes, or central nervous system.
- **Allogeneic:** The stem cells come from a donor. These donor cells replace the damaged ones in your bone marrow, potentially offering a long-term cure. An allogeneic stem cell transplant is used less often for DLBCL.
 - **Potential side effects:** low blood cell counts (white, red, and platelets), infection, bleeding, anemia, pain and issues with the digestive system, skin and hair problems, and issues with the kidneys, lungs, heart, eyes, or central nervous system, graft-versus-host disease (GvHD), and veno-occlusive disease (small vessels leading to the liver are blocked).

CAR T-cell therapy

Chimeric antigen T-cell receptor (CAR-T) therapy is a type of cellular immunotherapy that uses your own immune cells to fight cancer. In this treatment, doctors take a sample of your T-cells (a type of white blood cell), modify them in the lab to better recognize and attack lymphoma cells, and then put them back into your body.

- **Potential side effects:** cytokines release syndrome (CRS), which causes fever, chills, low blood pressure, and difficulty breathing; neurological effects such as confusion, memory loss, seizures, and severe headaches; increased risk of infection; low blood cell counts

Targeted chemotherapy

This class of drugs combines an antibody with a chemotherapy drug. The drug targets specific proteins on lymphoma cells. This allows the chemotherapy to target the cancer directly while safely protecting healthy cells.

- **Potential side effects:** tiredness, nausea, fever, low blood cell counts (increased risk of infections), numbness, and tingling



Factors that affect treatment

Discuss your treatment options with your doctor to make sure you understand the benefits and risks of each approach. Your treatment plan is based on:

- Your age and overall health
- DLBCL subtype and stage
- Disease status (first diagnosis or relapse, which is when the cancer returns after initial treatment)
- Any other medical problems you may have
- Your lifestyle and preferences

Long-term or late effects of treatment

Medical follow-up is important after treatment for DLBCL. You may need blood, bone marrow, or imaging tests to determine if you need further treatment. Your medical team should provide a care plan listing how often you will need follow-up visits and which tests you will have at those visits.

You may experience long-term or late effects of your treatment:

- **Long-term side effects** can last for months or years after treatment ends. Examples include fatigue, tingling, numbness, or pain in hands and feet, memory concerns, and risk of infections.
- **Late effects** are medical problems that do not show up until years after treatment ends. See your doctor to get follow-up care for possible early detection of heart disease, secondary cancers, fertility issues, thyroid problems, trouble concentrating, or chronic fatigue.



Living with DLBCL can be overwhelming. Seek medical help if you feel “down” or “blue” or don’t want to do anything and your mood does not improve over time. These could be signs of depression, an illness that should be treated even when you’re undergoing treatment for DLBCL. Treatment for depression has important benefits for people living with cancer. Remember, you are not alone.

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