

# Transplant and Non-Hodgkin Lymphoma (NHL)

**Learning more about your treatment options can help you make informed medical decisions.**

**This fact sheet tells you:**

- What NHL is
- What the transplant steps are
- When to see a transplant doctor
- Questions to ask your doctor

## What is NHL?

NHL is a group of blood cancers. In NHL, the body makes unhealthy lymphocytes. Lymphocytes are a type of white blood cell. They help your body fight infections. In NHL, the lymphocytes don't fight infections very well. These unhealthy lymphocytes form tumors in the lymph nodes and other parts of your body. The tumors can make lymph nodes in your body get bigger, usually around the neck, under the armpits and in the groin. The unhealthy lymphocytes may also collect in different parts of the body, including the liver, spleen and bone marrow.

There are more than 30 different types of NHL. The different types are based on how quickly the unhealthy lymphocytes grow and the type of lymphocytes affected. Lymphomas that tend to grow slowly are called indolent lymphomas. Aggressive lymphomas are ones that grow quickly. The unhealthy lymphocytes may be B cells, T cells or NK cells. Most NHLs are B-cell lymphomas.

The most common types of NHL are:

- Follicular lymphoma—an indolent B-cell lymphoma
- Diffuse large B-cell lymphoma (DLBCL)—an aggressive B-cell lymphoma
- Mantle cell lymphoma—an aggressive B-cell lymphoma

## What is a blood or marrow transplant (BMT)?

BMT, also known as a bone marrow transplant, can be used to treat NHL. It replaces blood-forming cells that become unhealthy lymphocytes with healthy ones. BMT is not surgery. For some people, transplant cures NHL. For others, it delays relapse (the disease coming back).

For NHL, there are 2 types of transplant:

- Autologous transplant uses your own blood-forming cells, which are collected and stored.
- Allogeneic transplant uses healthy blood-forming cells donated by someone else.

Both types of transplant are used to treat NHL, but autologous is more common. For aggressive NHLs, allogeneic transplant may be used if chemotherapy doesn't work or if the lymphoma comes back after an autologous transplant.

## Transplant steps

1. First, you will get chemotherapy, and possibly radiation, to kill the unhealthy cells. This can take up to 2 weeks.
2. On transplant day, the replacement cells are given to you through an intravenous (IV) infusion. The new cells travel to the inside of your bones.
3. After a few weeks, the donated cells begin to make healthy blood cells.
4. Then, you will need many months to recover. You will spend some of this time in or near the hospital.

Doctors, nurses and social workers will closely care for you during the entire process to prevent and treat any side effects or complications.

## When to see a transplant doctor

If you have follicular lymphoma, you should see a transplant doctor if:

- It doesn't get better with initial treatment
- The initial remission (no signs of disease) lasts less than 1 year
- It comes back a 2<sup>nd</sup> time
- It turns into a more aggressive lymphoma

If you have DLBCL, you should see a transplant doctor if:

- It comes back
- You have high or high-intermediate risk DLBCL and it's in remission (no signs of disease)
- The initial chemotherapy doesn't lead to remission

If you have mantle cell lymphoma or other high-risk lymphomas, you should see a transplant doctor soon after you start treatment.

## Your first appointment with a transplant doctor

At your first appointment, the doctor will:

- Review your medical history
- Talk with you about your treatment options and their risks and benefits
- Recommend the best time for you to get a transplant and prepare for treatment
- Start a donor search

## Resources for you

- Talk to someone who can help
  - Call: 1 (888) 999-6743
  - Email: [patientinfo@nmdp.org](mailto:patientinfo@nmdp.org)
- Find a clinical trial for NHL
  - Call: 1 (888) 814-8610
  - Email: [clinicaltrials@jcctp.org](mailto:clinicaltrials@jcctp.org)
- Order free resources
  - Visit: [BeTheMatch.org/request](http://BeTheMatch.org/request)

## Questions to ask your doctor

What are my chances of a cure or long-term remission if I get a transplant? If I don't get one?

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What are the risks of waiting or trying other treatments before a transplant?

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Does my current health or age affect how well transplant might work for me?

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What are the possible side effects of transplant? How can they be reduced?

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How might my quality of life change over time, with or without transplant?

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