

Lymphoma - Non-Hodgkin - Stages [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 11/2014

ON THIS PAGE: You will learn about how doctors describe lymphoma's location and spread. This is called the stage. To see other pages, use the menu on the side of your screen.

Staging helps to describe where NHL is located, if or where it has spread, and whether it is affecting other parts of the body. Doctors use diagnostic tests to find out the cancer's stage, so staging may not be complete until all of the tests are finished. Knowing the stage helps the doctor to decide what kind of treatment is best and can help predict a patient's prognosis. There are different stage descriptions for different types of cancer.

When staging NHL, doctors evaluate the following:

- The number of cancerous lymph node areas
- The location of the cancerous lymph nodes: regional (in the same area the cancer started) or distant (in other parts of the body)
- Whether the cancerous lymph nodes are on one or both sides of the diaphragm, the thin muscle under the lungs and heart that separates the chest from the abdomen
- Whether the disease has spread to the bone marrow, spleen, or extralymphatic organs (organs that are not part of the lymphatic system), such as the liver, lungs, or brain

The stage of lymphoma describes the extent of spread of the tumor using the Roman numerals one through four (I, II, III, or IV). This staging system is helpful for the most common subtypes of lymphoma, but for other subtypes, the disease has often spread throughout the body when it is diagnosed. In these situations, the prognostic factors become more important (see International Prognostic Index and Functional status, below). It is important to remember that even stage IV lymphomas are often highly treatable.

Stage I: Either one of these conditions:

- The cancer is found in one lymph node region (stage I).
- The cancer has invaded one extralymphatic organ or site (identified using the letter "E") but not any lymph node regions (stage IE).

Stage II: Either one of these conditions:

- The cancer is in two or more lymph node regions on the same side of the diaphragm (stage II).
- The cancer involves a single organ and its regional lymph nodes, with or without cancer in other lymph node regions on the same side of the diaphragm (stage IIE).

Stage III-IV: There is cancer in lymph node areas on both sides of the diaphragm (stage III), or the cancer has spread throughout the body beyond the lymph nodes (stage IV). Lymphoma most often spreads to the liver, bone marrow, or lungs. Stage III-IV lymphomas are common and are still very treatable. Stage III and IV are now considered one category because treatment and prognosis do not differ between them.

Progressive: If the cancer becomes larger or spreads while the patient is being treated for the original lymphoma, it is called progressive disease. This is also called refractory NHL.

Recurrent: Recurrent lymphoma is lymphoma that has come back after treatment. It may return in the area where it first started or in another part of the body. Recurrence may occur shortly after the first treatment or years later. If there is a recurrence, the cancer may need to be staged again (called re-staging) using the system above. This is also called relapsed NHL.

The original source for this material is Cheson BD, Fisher RI, Barrington SF, et al: Recommendations for initial evaluation, staging and response assessment of Hodgkin and non-Hodgkin lymphoma?the Lugano Classification [3] published in the Journal of Clinical Oncology, September 20, 2014; vol. 32, no. 27: 3059-3067.

International Prognostic Index

In addition to stage, a scale called the International Prognostic Index (IPI) is important in planning treatment for aggressive lymphomas. The IPI was developed based on evidence from thousands of patients with lymphoma. The results showed that certain features could help predict how well treatment would work, with patients classified into low-risk or high-risk groups depending on the risk factors listed below.

Features that the IPI identifies as risk factors:

- Age 60 or older
- Stage III or stage IV disease
- Blood test results showing higher than normal levels of LDH, a group of substances found in the blood called lactate dehydrogenase
- Lower overall health or performance status
- Cancer in more than one organ or site outside the lymph node region

For patients with follicular lymphoma, additional factors, such as the level of a part of a patient's blood, called hemoglobin, and the number of lymph node groups involved, are also considered.

These factors are used to estimate the chance of cure. For noncurable lymphoma, they help to predict how aggressive the lymphoma might be. This index is now used widely to help doctors make decisions about treatment recommendations.

Functional status

To determine a patient's prognosis, the doctor may also test how well a patient is able to function and carry out daily activities by using a functional assessment scale, such as the Eastern Cooperative Oncology Group (ECOG) Performance Status or the Karnofsky Performance Scales (KPS).

ECOG Performance Status. A lower score indicates a better functional status. Typically, the better someone is able to walk and care for himself or herself, the better the prognosis.

0: Fully active, able to carry on all pre-disease performance without restriction

1: Restricted in physically strenuous activity but able to walk and carry out light work while standing or sitting, such as light house work or office work

2: Ambulatory and capable of all self-care but unable to carry out any work activities. Up and about more than 50% of waking hours

3: Capable of only limited self-care; confined to bed or chair more than 50% of waking hours

4: Completely disabled; cannot carry out any self-care; totally confined to bed or chair

5: Dead

KPS. A higher score indicates a better functional status.

100: Normal; no complaints; no evidence of disease

90: Able to carry on normal activity; minor symptoms of disease

80: Normal activity with effort; some symptoms of disease

70: Cares for self; unable to carry out normal activity or active work

60: Requires occasional assistance but is able to care for needs

50: Requires considerable assistance and frequent medical care

40: Disabled; requires special care and assistance

30: Severely disabled; hospitalization is indicated, but death is not imminent

20: Very sick; hospitalization necessary; active treatment necessary

10: Approaching death; fatal processes progressing rapidly

0: Dead

Information about the cancer's type, subtype, and stage, as well as prognostic factors, will help the doctor recommend a treatment plan. The next section helps explain the treatment options for this type of lymphoma. Use the menu on the side of your screen to select Treatment Options, or

you can select another section, to continue reading this guide.

Links:

[1] <http://www.cancer.net/cancer-types/lymphoma-non-hodgkin/stages>

[2] <http://www.cancer.net/about-us>

[3] <http://jco.ascopubs.org/content/32/27/3059.full>