

## Is CLL Insurable?



**Chronic Lymphocytic Leukemia (CLL)** results from damage to the bone marrow. The damaged marrow leads to uncontrolled growth and release of abnormal lymphocytes (a type of white blood cell) into the blood stream. It is an acquired leukemia (as opposed to being inherited)

About 8,100 new cases are found each year in the U.S. alone, mostly on older people over 50 years of age. It currently has no cure but, new research is bringing new approaches to managing the disease.

CLL develops gradually so the onset is slow and non-descript. In the initial stages the patient generally experiences no symptoms. As the disease progresses, fatigue and shortness of breath are generally the first symptoms. Weight loss may follow. CLL is usually discovered in the course of routine medical care. **The most common finding is an elevated white blood count (WBC).**

Confirming the suspected diagnosis of CLL involves a bone marrow study. The pattern of abnormal lymphocytes in the bone marrow study can be used to determine the “probable rate of progression” of the disease.

In addition, it is now possible to identify the specific type of abnormal cell line in the bone marrow that is causing CLL. There are three cell types: B cell, T cell and NK cells. **Most patients have a B cell type of CLL.**

### Staging CLL

Because leukemia starts in the bone marrow and often has spread to other organs by the time it is detected, there is no need for traditional staging. Instead, physicians rely upon cytologic (cellular) classification systems to identify the type and subtype of leukemia. **Cell classification systems, in turn, help to predict the prognosis, or outcome, of specific forms of leukemia and the likely response to treatment.**

**Chronic lymphocytic leukemia (CLL) has no standard staging system.** CLL clinical classification is by one of two cytologic staging systems: Rai and Binet. These staging systems were developed more than 20 years ago.

It is important to note that life insurance underwriting manuals use their own version of these staging systems to assess and price applicants. They generally divide applicants with CLL into three groups:



**Stage 0**-These are patients with WBC counts less than 50,000 (normal WBC counts are 5,000 to 10,000), no enlarged lymph nodes, no enlargement of the spleen, no anemia and a normal platelet count. **As important, they are not being treated with any form of chemotherapy.**



**Stage I**-These are patients with WBC counts less than 50,000 *but with enlarged lymph nodes*. There is still no anemia, no enlargement of the spleen and a normal platelet count.



**Stage II-IV**-These are patients who have further progression of the disease (i.e. anemia, enlarged spleens, etc.) or are using chemotherapy.

## Treatment



Patients with CLL are usually not treated until they demonstrate one of the following:

1. Bone marrow failure (i.e. anemia, low platelet count)
2. Symptoms (i.e. fever, night sweats, weight loss)
3. Increased “tumor burden” (i.e. high WBC counts, large lymph nodes and enlarged spleen)

Patients who require treatment will, in most cases, be treated with chemotherapy. These drugs include:



### *Alkylating Agents*

**Chlorambucial** (Brand Name: **Leukeran**) is still considered the standard treatment for advanced stage CLL. Response rate is 50-70% of cases but complete responses are extremely rare. See this link for an overview of **Leukeran** <http://www.nlm.nih.gov/medlineplus/druginfo/medmaster/a682899.html>



### *Purine Analogs*

These are “second line” medications for patients who do not respond to **Leukeran** or relapse after **Leukeran** therapy. These medications include **pentostatin** (Brand Name: **Nipent**) and **fludarabine**. See these links for an overview for **Nipent** and **fludarabine**:  
<http://www.nlm.nih.gov/medlineplus/druginfo/medmaster/a692004.html>  
<http://www.nlm.nih.gov/medlineplus/druginfo/medmaster/a692003.html>

## Monoclonal antibody treatment



This is a relatively new type of treatment. Antibodies are proteins that are part of the body's natural defense against infection. They recognize foreign cells and organisms and destroy them. Monoclonal antibodies have been designed to recognize specific types of cancer cells. *A type of monoclonal antibody called alemtuzumab (brand name **Campath**) can be used to treat CLL in people who have previously had chemotherapy.* Monoclonal antibodies tend to have little effect on normal body cells but may cause a high temperature, shaking, and a low blood pressure. Another type of monoclonal antibody may also be used - it is known as rituximab (brand name **Rituxan**) and tends to cause few side effects. Both these drugs are usually given as part of research trials, so that their effectiveness can be properly

assessed.

In addition, patients may have their spleen removed as part of their treatment. Bone marrow transplants may ultimately represent a curative strategy for CLL in the future

---



### Prognosis

Most people with CLL live for more than 10 years after diagnosis.

Patients with severe CLL can expect to survive for up to 5 years after diagnosis.

---



### Underwriting Comment

**Applicants with CLL may be insurable, but require careful screening prior to submitting a formal application to a carrier.**

Use these questions to screen applicants with a history of CLL:

- 1. Date of diagnosis? Establish when the diagnosis was made and verify that a bone marrow study was completed.**
- 2. WBC value at diagnosis?**
- 3. Staging at diagnosis? The applicant can contact his or her physician and obtain this information.**
- 4. Current and past treatments? Determine if the applicant has had any form of treatment. In addition, obtain the names of all the medications the applicant is currently taking.**

These four questions will help you quickly determine the insurability of an applicant with CLL. You should present your findings to a home office underwriter who will help you with insurability and pricing determinations.