

# Chronic Lymphocytic Leukemia (CLL)

## What is CLL?<sup>1,2</sup>

CLL is a slow-growing blood cancer that most commonly arises from B cells, a type of white blood cell that originates in the bone marrow.

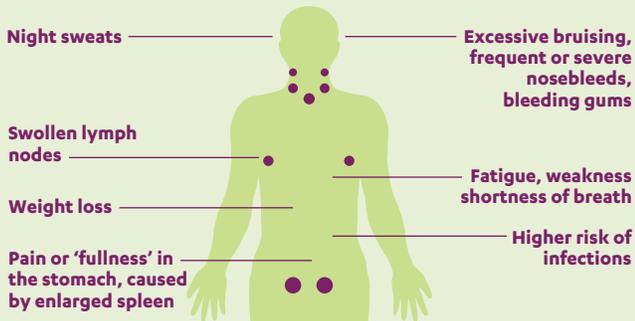
B cells are part of the immune system and play an important role in fighting infection in the body. CLL is the result of a malfunction in the normal lifecycle of a B cell, which causes the B cell to become malignant and reproduce at an abnormal rate.



In malignant B cells there is a dysfunction in the cellular signalling pathways which control the cell. This causes the malignant B cells to move to and remain within the protective environment of the lymphatic system, such as bone marrow and the lymph nodes. In these environments they build up in large numbers as they continue to proliferate and survive.

## Signs and Symptoms<sup>3</sup>

For some people, CLL is asymptomatic; however, possible signs of CLL may include:



## Prevalence and Patients<sup>4,5,6</sup>



CLL is more prevalent in men than women

Average age at diagnosis is

**72**  
years old

Older CLL patients can be more difficult to treat given their overall health and the potential for other pre-existing conditions

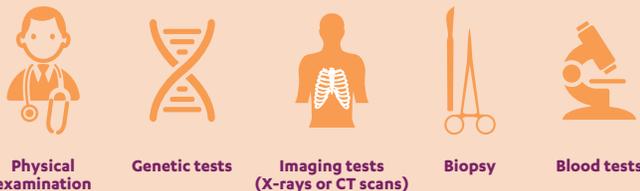
Median survival is

**8-12**  
years

However, prognosis varies based on stage and presence of chromosomal abnormalities

## Diagnosis<sup>7</sup>

Several exams and tests may be used to help diagnose CLL:



## Chromosomal Abnormalities & CLL<sup>8,9</sup>



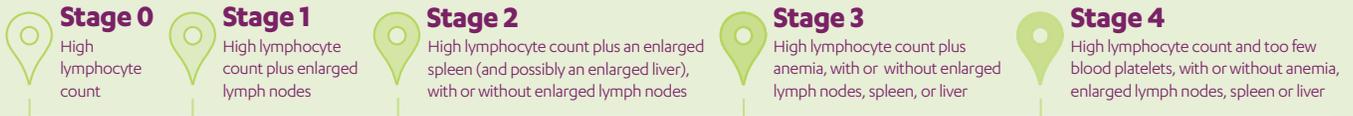
of CLL patients have some form of chromosomal abnormality in their B cells. Some of these patients may have poor response to conventional treatment, rapid disease progression and short survival.



The median predicted overall survival for patients with the del 17p and 11q mutations are just two to three years and six to seven years, respectively. This is significantly less than the nine to 10-year median predicted survival for CLL patients without chromosomal abnormalities.

## Rai Staging<sup>10</sup>

The Rai staging system is most often used in the U.S. for CLL:



## Treatment<sup>\*11,12,13,14,15</sup>

Patients commonly receive multiple treatments over the course of their disease:



Treatments have improved in recent years, but CLL can still be a challenging disease to treat.

There remains an urgent need for new treatments for difficult-to-treat patients who have relapsed or for whom other available therapies are not appropriate.

\*All medicines and therapies have side effects; patients should talk to their doctors about which therapies are appropriate for them

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