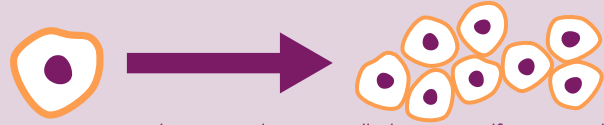


# Chronic Lymphocytic Leukaemia (CLL) / Small Lymphocytic Lymphoma (SLL)

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

CLL/SLL is generally a slow growing blood cancer that originates from B cells, a type of white blood cell (lymphocyte)

SLL is related to CLL, but whereas CLL cells are found in both the lymphatic system and the blood, SLL is confined to the lymph nodes

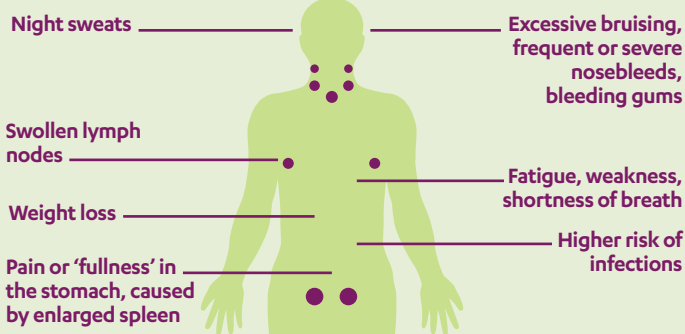


B cells are part of the immune system and play an important role in fighting infection in the body. CLL/SLL is the result of a malfunction of B cells which causes them to become malignant and reproduce at an abnormal rate

In malignant B cells there is a malfunction in the cellular signalling pathways which control cell proliferation, adhesion, migration and survival. 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>3,4</sup>

For some people, CLL/SLL is asymptomatic. However, possible signs of CLL/SLL may include:



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



In the Western world there are approx. four cases a year per 100,000 people

CLL/SLL is more prevalent in men than women

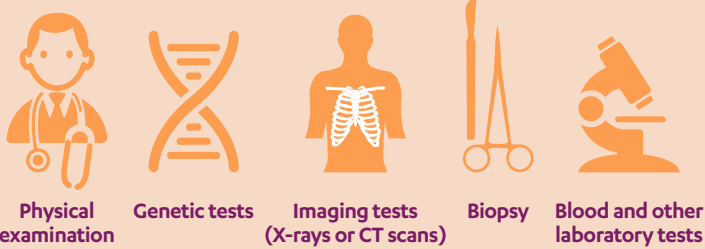


Age at diagnosis

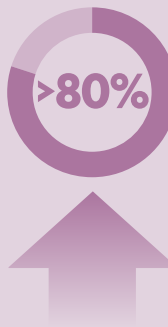
Overall, the period for which 78% of CLL patients will survive after diagnosis

## Diagnosis<sup>3,4</sup>

Diagnosis and staging of CLL/SLL may include the following examinations:



## Chromosomal Abnormalities & CLL/SLL<sup>7,8</sup>



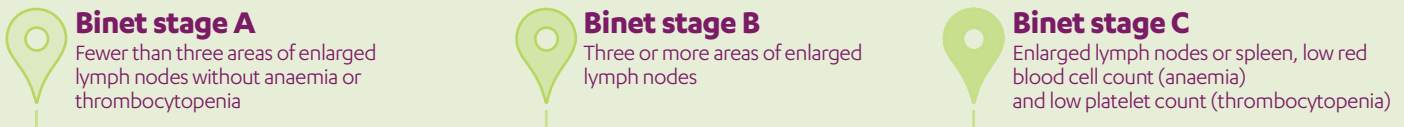
of CLL/SLL patients have some form of chromosomal abnormality. These patients may have poor response to conventional treatment, rapid disease progression and short survival



The median predicted survival for patients with the del 17p mutation is just two to three years and for patients with the 11q mutation is six to seven years - significantly less than nine to ten year median predicted survival for CLL/SLL patients without abnormalities

## Staging<sup>6,9</sup>

The Binet staging system is most often used in Europe for CLL/SLL



## Treatment<sup>\*10,11,12,13,14</sup>

Patients commonly receive multiple treatments over the course of their disease



CLL/SLL can be a challenging disease to treat. Many patients will relapse or become resistant to treatment

CLL/SLL treatments have improved in recent years. Many promising new therapies are currently being investigated<sup>15</sup>

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

# Chronic Lymphocytic Leukaemia (CLL) / Small Lymphocytic Lymphoma (SLL)

## References

- 1 Hallek M. Signaling the end of chronic lymphocytic leukemia: new frontline. *Blood*. 2013;112(23).
- 2 Chiorazzi M, et al. Mechanisms of disease Chronic Lymphocytic Leukemia. *N Engl J Med*. 2005;352:804-15.
- 3 Gore JM. Chronic myeloid leukemia and chronic lymphocytic leukemia. *JAAPA*. 2014;27(2).
- 4 American Cancer Society. Detailed guide: CLL diagnosis. Available from: <http://www.cancer.org/cancer/leukemia-chroniclymphocyticcll/detailedguide/leukemia-chronic-lymphocytic-diagnosis> Accessed July 03, 2014.
- 5 Siegel R, et al. Cancer Treatment and Survivorship Statistics, 2012. *CA Cancer J Clin*. 2012;62:220-241.
- 6 Eichhorst B, Dreyling M, Robak T. Chronic lymphocytic leukemia: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Annals of Oncology*. 2011;22:vi50–vi54
- 7 Stilgenbauer S, Bullinger L, Lichter P, et al. Genetics of chronic lymphocytic leukemia: genomic aberrations and VH gene mutation status in pathogenesis and clinical course. *Leukemia*. 2002;16: 993-1007.
- 8 Döhner H, Stilgenbauer S, Benner A, et al. Genomic aberrations and survival in chronic lymphocytic leukemia. *N Engl J Med* 2000;343:1910–6.
- 9 American Cancer Society. Detailed guide: CLL staging. Available from: <http://www.cancer.org/cancer/leukemia-chroniclymphocyticcll/detailedguide/leukemia-chronic-lymphocytic-staging> Accessed July 03, 2014.
- 10 American Cancer Society. Chemo – What it is, How it Helps. Available from: <http://www.cancer.org/acs/groups/cid/documents/webcontent/003321-pdf.pdf> Accessed July 03, 2014.
- 11 American Cancer Society. Radiation Therapy – What it is, How it helps. Available from: <http://www.cancer.org/acs/groups/cid/documents/webcontent/003299-pdf.pdf> Accessed July 03, 2014.
- 12 National Cancer Institute. Biological Therapy. Available from: <http://www.cancer.gov/cancertopics/treatment/biologicaltherapy> Accessed July 03, 2014.
- 13 American Cancer Society. Stem cell transplant. Available from: <http://www.cancer.org/treatment/treatmentsandsideeffects/treatmenttypes/bonemarrowandperipheralbloodstemcelltransplant/stem-cell-transplant-types-of-transplant> Accessed July 03, 2014.
- 14 Cancer. Net. Available from: <http://www.cancer.net/cancer-types/leukemia-chronic-lymphocytic-cll/treatment-options> Accessed July 03, 2014.
- 15 Cancer Research UK. Non-Hodgkin lymphoma: treatment. Available from: <http://www.cancerresearchuk.org/cancer-help/type/non-hodgkins-lymphoma/treatment/types> Accessed July 03, 2014.