Leukaemia occurs when abnormal white blood cells are produced whilst blood is being created in the bone marrow. The white blood cells do not fully develop; so do not provide the immunity offered by healthy cells. CLL is when too many under-developed lymphocytes are produced, building to cause large, swollen lymph nodes. In CLL it is the lymphocytes white blood cells that are cancerous.

The most prevalent lymphoid malignancy in Western countries is CLL. An average person’s lifetime risk of getting CLL is about 1 in 200. The median age at diagnosis is 72 and nearly 70% of patients are diagnosed at age 65 or older.

The most common type of leukaemia, accounting for about 1/3 of all cases, is CLL.

The Lymphatic System

- Protecting the body from infection
- Draining fluid from the body's tissues

It is made up of organs such as the bone marrow, thymus, spleen and lymph nodes.

A network of lymphatic vessels connects lymph nodes around the body. Circulating around these vessels is a liquid called 'lymph' which contains lymphocytes (white blood cells essential to the body's defence against infection and disease).

There are two trillion lymphocytes in the body.

The main causes of CLL are unknown, but research is going on to find out more.

Factors that have been shown to increase the risk include:

- How far the leukaemia has developed
- The patient’s age
- The patient’s general health and fitness
- Chemotherapy and chemoimmunotherapy (i.e. chemotherapy in combination with a monoclonal antibody)

Other possible risk factors:

- Having suffered from pneumonia, sinusitis, shingles, auto immune haemolytic anaemia, inflamed prostate
- Being overweight
- Radiation exposure
- Certain hair dyes

Other treatment options include:

- Chemotherapy and chemoimmunotherapy
- Monoclonal antibodies
- Steroids
- Radiotherapy
- Stem cell transplant
- Watchful waiting

References: