



The CLL Bloodline

January 2017

Over the course of a year of monthly meetings, The CLL Bloodline will teach the BASICS needed to understand CLL, bring news, help learn new acronyms and new vocabulary, and offer simple fun quizzes.

MONTHLY QUIZ:

Neutrophils are:

1. A type of immature red blood cells
2. Important in preventing bruising or bleeding
3. A white blood cell important in fighting infections
4. The blood cells that when they become malignant, cause CLL
5. Blood cells that come from Switzerland or any other neutral country.

The correct answer is #3. Neutrophils are the most common white blood cell in the body and are critical in fighting infections, especially bacterial infections. They are also involved in inflammation unrelated to infection and are the main cells found in pus. CLL is a cancer of a different and less common white blood cell called a lymphocyte. Although CLL is not directly associated with neutrophils, they can be affected by its treatments, especially chemotherapy.

NEWS:

Dec. 8, 2016: The European Commission (EC) has approved venetoclax (Venclyxto) as a first-in-class, oral, once-daily medicine that selectively inhibits the function of the BCL-2 protein. BCL-2 prevents the natural death of cells, including CLL cells. The EC has granted conditional marketing authorization for venetoclax monotherapy for the treatment of chronic lymphocytic leukaemia (CLL) patients with 17p deletion or TP53 mutation who are unsuitable for or have failed a B-cell receptor pathway inhibitor; and for the treatment of CLL patients without 17p deletion or TP53 mutation who have failed both chemoimmunotherapy (such as fludarabine/cyclophosphamide/rituximab (FCR), OR bendamustine/rituximab (BR) and a B-cell receptor pathway inhibitor (such as ibrutinib or idelalisib).

THE BASICS: Definitions and Diagnosis

CLL is a slow-growing or indolent lymphoma of the B-lymphocytes, a type of white blood cell. They are an important part of our immune system. CLL is both a leukemia and lymphoma and can be found in blood, marrow and lymphatic tissue, including the lymph nodes and the spleen. SLL (small lymphocytic lymphoma) is the exact same disease, but has not significantly spilled over into the blood. CLL/SLL is a cancer of the B cells that are involved in making antibodies. It is diagnosed by finding ≥ 5000 monoclonal (genetically identical) B-lymphocytes in the blood for the duration of at least three months. The clonal nature of the circulating B-lymphocytes should be confirmed by flow cytometry, a test that identifies specific surface markers on the cell.

WORD/ACRONYM OF THE MONTH:

Clone: A group of cells that are genetically identical and originate from a single parent cell. Leukemia cells develop from one original abnormal cell. CLL is an example of a clonal cancer.