



# The CLL Bloodline

## November 2018

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

### **MONTHLY QUIZ: The spleen is important in CLL. All of the following are true except:**

1. The white pulp acts as an immune organ, much like a big lymph node. Both normal and cancerous lymphocytes can grow here, sometimes leading to massive splenic enlargement.
2. The red pulp acts to rid the body of old red blood cells and platelets and recycles their contents, including the iron. When enlarged, it can overdo the clearing out leading to anemia and low platelets.
3. The marginal zone is located between the red and white pulp. It acts as a blood filter trapping antigens from the circulation and passing them on to the white pulp where the lymphocyte can act on them.
4. The spleen can serve as a back up to the bone marrow by releasing blood cells into the circulation.
5. One can live without a well-functioning spleen or even after its total removal.
6. Removal of the spleen is sometimes done prophylactically in CLL to lower the risk of infections.

**The correct answer is #6.** The spleen actually helps the body defeat and remove certain serious (encapsulated) bacteria that can cause pneumonia, meningitis and other infections. All the rest are correct.

**NEWS:** The CLL Society launched a survey 1 year ago that was completed by 1147 patients, making it the largest ever CLL patient survey. Results will be presented to thousands of hematologists from around the world at ASH (American Society of Hematology) 2018, the most important blood conference. Thanks to all who participated in the survey. It's one way we try to ensure that doctors know what is really important to patients.

### **THE BASICS: DEFINITIONS AND DIAGNOSIS**

In our May Bloodline we discussed some factors that go into deciding your choice of therapy. This month we will continue our review of large categories of treatment.

**Targeted Therapies (TT)** are drugs that interfere with specific targets important to cancer cell growth and survival. In CLL these include monoclonal antibodies (MABs) that attack a protein found on the cells' surface. This protein also may be found on some normal cells but not on most cells. Examples include rituximab, ofatumumab and obinutuzumab that target CD20 found on both CLL and normal B cells. TT may also block specific enzymes called kinase such as BTK blocked by ibrutinib or PI3K blocked by idelalisib and duvelisib. Both are part of the B cell receptor (BCR) pathway that is so critical to the CLL cell's survival. Unlike many chemotherapies, TT do not damage DNA or target all fast growing tissues such as hair or the GI track. TT tend to be newer and more expensive than "chemo" discussed last in last month's Bloodline.

### **WORD/ACRONYM OF THE MONTH: IMMUNOTHERAPY TREATMENT**

Immunotherapy is a treatment that uses the patient's immune system to fight cancer. These are substances or modified substances made from living organisms to fight cancer such as MABs (antibodies) or CAR-Ts (cells). Just to confuse things, it may also be called biological therapy or targeted therapy.

***If the CLL Society has helped you or a loved one, please consider making a contribution.***