CLL SOCIETY

The CLL Bloodline
November 2020

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 of the spleen acts as an immune organ, much like a giant lymph node. Both normal and cancerous lymphocytes can grow here, sometimes leading to massive 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 spleen can serve as a back up to the bone marrow by releasing blood cells into the circulation.
4. One can live without a well-functioning spleen or even after its total removal.
5. Removal of the spleen is sometimes done prophylactically in CLL to lower the risk of infections.

The correct answer is #5 The spleen actually helps the body remove certain "encapsulated" bacteria that can cause pneumonia, meningitis and other infections and its removal is associated with more serious infections.

NEWS:

The CLL Society is again proud to share that for the 4th time in 5 years we are presenting research, this time in collaboration with Platform Q at the very competitive ASH Annual Meeting. Our abstract is: Improving Physician-Patient Decision Making for Treatment of Chronic Lymphocytic Leukemia with BTK Inhibition.

The FDA granted Fast Track Designation to Ublituximab plus Umbralisib in CLL. This could accelerate its approval. Umbralisib is an experimental PI3K inhibitor and ublituximab is a monoclonal antibody. These terms are explained below.

THE BASICS: In our May Bloodline, we discussed some factors that go into deciding your choice of therapy. This month we will continue our definitions with targeted therapies. This gets pretty detailed, but the crucial point is that "targeting" drugs helps.

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 specific protein found on the cells' surface. This protein may be found on some normal cells but not on most cells. Examples include rituximab, ofatumumab, obinutuzumab and now ublituximab that target CD20 found only on CLL and normal B cells. Another TT are tyrosine kinase inhibitors (TKIs) that inhibit specific enzymes called tyrosine kinases such as BTK which is blocked by ibrutinib and acalabrutinib or PI3K blocked by idelalisib, duvelisib and umbralisib. Both BTK and PI3K are part of the B cell receptor (BCR) pathway that the cancer has become "addicted" to and is critical to its survival. Blocking it kills the cancer. Venetoclax is different and is not a TKI. It triggers apoptosis or programmed cell death or suicide leading to rapid killing of the cancerous CLL cells that had turned off that death pathway in order to survive. Unlike chemotherapies, TT do not damage DNA or target all fast-growing tissues, cancerous or not, such as hair or the gut. The important point is that because TT are "targeted," they tend to cause less collateral damage. They are usually newer and more expensive than "chemo" that was discussed last in October's Bloodline.

WORD/ACRONYM OF THE MONTH: IMMUNOTHERAPY THERAPY

Immunotherapy therapy uses our immune system to fight cancer and are made from living organisms. They include mAbs (monoclonal antibodies) and CAR-Ts (genetically modified T cells). Just to confuse things, it may also be called biological therapy or targeted therapy.

The CLL Society is invested in your long life. Please invest in the long life of the CLL Society