Happy New Year! Over the course of a year of monthly meetings, The CLL Society Bloodline will teach the basics needed to understand CLL, starting this month with definitions and diagnosis. It will also provide news, help with acronyms and new vocabulary words, and offer simple fun quizzes. The cycle just restarted and is updated yearly.

MONTHLY QUIZ: Neutrophils are:
1. A type of immature white 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 were first discovered in Switzerland, a neutral country.

**ANSWER:** The correct answer is #3. Neutrophils or “neuts” are the most common white blood cell in the body and are critical in fighting infections, especially bacterial. They are also involved in inflammation and are the main cells found in pus. If we have too few neuts, or a low absolute neutrophil count (ANC) from chemotherapy or CLL, we may be at risk for severe infections. They are called neutrophils because their granules stain neutral when seen under the microscope.

Chronic lymphocytic leukemia (CLL) is a cancer of a different white blood cell, the lymphocyte.

NEWS:
At the American Society of Hematology (ASH) Annual Meeting, we learned when the CAR-T liso-sel is used with ibrutinib, 89% of patients have no detectable disease. This may lead to its approval.

Beyond ASH, zanabrutinib, a new oral targeted therapy similar to ibrutinib and acalabrutinib is now recommended in the NCCN (National Comprehensive Cancer Network) guidelines meaning that it is a viable “off-label” CLL treatment.

In the UK, research hints that long-time CLL patients infected with SAR-CoV-2 may be harboring the virus and may be fostering the new viral mutations.

THE BASICS: Definitions and Diagnosis
CLL is a slow-growing or “indolent” lymphoma of the B-lymphocytes, a subtype of white blood cell and an important part of our immune system. CLL is both a leukemia because it’s found in the blood, and a lymphoma because it arises from a lymphocyte. It can be found in the blood, bone marrow, and lymph tissue, including the lymph nodes and the spleen, and rarely in other organs such as the liver, kidneys, and even the brain and lungs. SLL (small lymphocytic lymphoma) is the same disease that 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 a duration of at least 3-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, sort of an immune fingerprint. A bone marrow biopsy and imaging such as CT or PET scans are rarely needed to make the diagnosis and should not be done at diagnosis without a good reason.

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 a clonal cancer, though just to confuse things, one may have several sub-clones of CLL that fight for dominance and respond differently to treatment. That is why combinations of drugs are sometimes used in treatment, to wipe out all the subclones.

SURVEY:
Every year we ask all the members of our support groups to complete a brief confidential survey so that we improve what we are doing and report outcomes to our sponsors. Please complete at: https://supportgroup2020.questionpro.com. Thanks for your feedback and recommendations.

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