

The CLL Bloodline

December 2019

MONTHLY QUIZ: CLL (chronic lymphocytic leukemia) and SLL (small lymphocytic lymphoma)

- 1. Are entirely different unrelated cancers.
- 2. Are related but different cancers.
- 3. Are the identical cancers in different parts of the body; SLL in the nodes only, CLL in the blood and maybe the lymph nodes.
- 4. SLL may become CLL.
- 5. 3 and 4 are correct

ANSWER: The correct answer is #5. To diagnosis CLL there must be > 5000 clonal cells per microliter (μ I) of blood. In SLL, clonal cells with the identical immunophenotyping (genetic fingerprinting), as in CLL, are found in at least one lymph node, but there are < 5000 of these cells per μ I of blood. SLL becomes CLL if the count exceeds 5000.

NEWS:

On November 21, 2019 the FDA announced that it had approved the use of acalabrutinib (CALQUENCE, AstraZeneca) for the treatment of CLL/SLL. Through Project Orbis, an international collaborative that includes the Australian Therapeutic Goods Administration (TGA), Health Canada and the FDA, there was simultaneous approval of the drug for CLL/SLL in Australia, Canada, and the U.S.

THE BASICS: Types of Treatment

This month we will continue our review of large categories of treatment.

Cellular Therapies are treatments that use cells rather than drugs to treat CLL. The first cellular therapy was a hematopoietic stem cell transplant (**HSCT**), or a bone marrow transplant. In CLL, this is usually done using a matched donor's stem cells. It may be curative, but infections and graft versus host (GVHD) disease, where the new immune system attacks more than cancer, makes transplant very high-risk. **CAR-T** (chimeric antigen receptor – T cells) is experimental in CLL where our own T-lymphocytes are harvested, trained to attack our CLL, grown, and then re-infused. Results in CLL are amazing for some but the data are early. Neurotoxicity and cytokine release syndrome (CRS), where inflammatory molecules (cytokines) are released causing flu-like symptoms or worse, can occur and even be fatal; however, they can almost always be successfully managed.

WORD/ACRONYM OF THE MONTH: ALLOGENEIC STEM CELL TRANSPLANT

Allogeneic stem cell transplant is a procedure in which bone marrow stem cells are taken from a genetically matched donor (a sibling or unrelated donor) and given to the patient through an IV. The cells migrate to and hopefully engrafts in the patient's marrow, giving new stem cells to build all the blood components, and with it, a new immune system that recognizes and attacks the cancer as an invader. This is called Graft versus Leukemia (GVL).

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