

The CLL Bloodline

October 2019

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

MONTHLY QUIZ: Anemia (low red cell count) is a common complication in CLL. All of the following causes are directly related to CLL and its treatment except:

- 1. Crowding in the bone marrow by the CLL cancer cells so there is not enough room left to make red blood cells (RBC).
- 2. An enlarged spleen that both hoards and destroys too many red blood cells (RBC).
- 3. Suppression of the bone marrow by chemotherapy or other drugs used to treat CLL.
- 4. Low levels of iron or folate or B12 limiting the raw material needed to build new RBC.
- 5. Destruction of the RBC by an auto-immune process (auto-immune hemolytic anemia or AIHA).
- 6. Direct toxic effects on the bone marrow by the CLL.
- 7. A rare complication where a second blood cancer called myelodysplastic syndromes or MDS develops leading to bone marrow failure.

ANSWER: The correct answer is #4. Although low iron, folate, or B12 may be found in CLL, the disease and its treatment should not directly lead to these deficiencies. All the others are possible causes of anemia in CLL and thus re-enforce the importance of having the correct assessment of the cause of the anemia, as each is treated differently. #5, the toxic effects of the disease have just been reported.

NEWS:

CLLAN Horizons is a meeting of international nonprofits that serve the CLL community. The conference in Edinburgh brought delegates from 34 countries. The CLL Society planned and led many of the sessions.

BASICS: Types of CLL Treatment

This month we start describing broad categories of therapy.

Chemo-immunotherapy (CIT) used to be the main treatment for CLL. Today, depending on which CLL expert you consult, there would be no role or a very limited role for only for a few frontline patients with the best predictive markers. Sadly, it is being used often in the community. It consists of chemo drugs that non-specifically kill any fasting growing cells such as cancer cells, but also skin, hair, gut and normal blood cells. In CLL, common drugs are fludarabine (F), cyclophosphamide (C) bendamustine (B) and chlorambucil. Chemo is more effective when combined with immunotherapy (IT), usually a monoclonal antibodies (MAB) such as rituximab (R), ofatuzumab, and obinutuzumab (Gazyva) that target a specific marker (CD20) found only on CLL and normal B cells. Common CIT are FCR, BR, chlorambucil, and obinutuzumab. There is NO role for chemotherapy by itself to treat CLL, though that too is still used by many community hematologists. Recent research has shown that ibrutinib is almost all circumstances superior to both FCR and BR, making the role of CIT even more limited.

WORD/ACRONYM OF THE MONTH: CD

CD or Clusters of Differentiation are proteins on the cell surface used for immunophenotyping (cellular fingerprinting) for diagnosis. They are also the targets for monoclonal and CAR-T cells to attack.

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