



# The CLL Bloodline

December 2016

## MONTHLY QUIZ:

Choose the correct statement below:

**The cancerous B lymphocytes that cause our CLL to proliferate in all the following areas of the body except:**

1. The lymph nodes
2. The blood stream
3. The bone marrow
4. The spleen

**The correct answer is #2.**

CLL is a cancer of the B cells. It is a leukemia and the clonal cells accumulate in the blood stream causing the high white count. However, they only proliferate in the nodes, bone marrow and the spleen.

## THE BASICS: Response to Therapy

In order to be consistent, doctors and researchers have agreed on standard ways to describe response to therapy. The definitions are actually quite technical and are changing. This is a simplified version. We start with the worst and work towards the best.

**Progressive disease (PD):** As the name suggests, the cancer continues to grow despite the treatment. This is not good news.

**Stable disease (SD):** The cancer neither progresses nor recedes. This can be a durable and OK circumstance, especially if the CLL is not causing problems.

**Partial Remission (PR):** The cancer has been knocked back, but there are still cancer cells to be found in the blood or marrow. PR requires at least a 50% reduction in the size of lymph nodes and in the number of lymphocytes in the peripheral blood stream.

**Complete Remission (CR):** The absence of clonal lymphocytes in the blood is one of the major criteria. All lymph nodes need to be normal size (<1.5 cm). In a clinical trial, the confirmation of a CR usually requires a bone marrow biopsy that shows no CLL.

**Minimal Residual Disease (MRD)-Negative:** This is the best result with the longest duration of response. Special tests can be used to track a single CLL cell in 10,000 or more leukocytes within peripheral blood or bone marrow. If no cells are found, you are MRD-, a very good thing.

## WORD OF THE MONTH

**Flow Cytometry** is a powerful blood test that looks at cellular surface markers. It can confirm the diagnosis of CLL by identifying the typical clonal population of cells. It can also find CLL cells when there is only one cancer cell in 10,000 or more lymphocytes.