

MONTHLY QUIZ:

The cancerous B lymphocytes that cause our CLL 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 both a leukemia and lymphoma. The cancer clonal cells accumulate in the blood stream causing the high white count. However, they only proliferate in the nodes, bone marrow, and the spleen.

NEWS:

Stan Kurtz made it! He swam 22 miles from Two Harbors to Palos Verdes across the Pacific Ocean, one-half of it in the dark. Patty and I were on the boat. It was an amazing experience. Stan raised more than \$30,000 for the CLL Society and it is not too late to give. Please support him and us at https://www.gofundme.com/swimcatalinaforleukemia.

BASICS: CLINICAL TRIAL PHASES

- Phase 1. Is the drug safe and what's the best dose? There is no placebo arm. These are small trials. While these are officially designed to check for safety, clearly efficacy is also looked for.
- Phase 2. Does the drug work? Is it effective? Medium size trials where there is no placebo or control arm. There can be different arms with different combinations or sequencing of the drugs.
- Phase 3. Is it better than the standard of care? These are large trials where there is randomization to either a control arm of standard care or the new therapy. If there is no "standard of care," there may be a placebo arm.
- Phase 4. What else do we need to know about this already approved drug?

WORD/ACRONYM OF THE MONTH: HETEROGENEITY

Heterogeneity is the quality of being diverse in character or content. CLL is a heterogenous disease in that we are all different in how our disease progresses and is managed. In clinical trials and statistics, the concept of **heterogeneous** populations is critical. Trials need to "compare apples to apples." This particularly applies in CLL where there is such heterogeneity. One example is that you can't compare relapsed /refractory patients to frontline patient from different trials.

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