NORTHSIDE NEIGHBOR NEWSPAPERS

Drugs fighting leukemia, lymphoma fast-tracked

by Staff Reports
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September is Blood Cancer Awareness Month, and the Leukemia & Lymphoma Society's Georgia chapter, based in Buckhead, last week announced some good news in the drugs fighting the diseases.

Since May, four of the last eight Food and Drug Administration breakthrough therapy designations — when the FDA expedites the development and review of drugs for serious or life-threatening conditions — have been for experimental blood cancer therapies: Nivolumab for Hodgkin's lymphoma, Elotuzumab for chronic myelogenous leukemia, Blinatumumab and CTL-019, both for acute lymphoblastic leukemia.

Washington resident Bess Wyche, the daughter of Buckhead residents Henry and Ellen Adair Wyche, was one of the first patients in the country to receive Blinatumumab, during her fight against acute lymphoblastic leukemia, a rapidly progressing cancer of the blood and bone marrow in which the median overall survival rate of adult patients is just three to five months.

Wyche, 27, was a prime candidate to test the effectiveness of this revolutionary drug. A healthy and fit young adult with no prior history of cancer, she was diagnosed with the disease in January 2011. Following a grueling year of intensive hyper central-venous-access-device chemotherapy with debilitating side effects, she relapsed in just six weeks when her disease newly surfaced in her spinal fluid. With few options available, she underwent intensive chemo to push the cancer back once more. In February 2012 as a patient at MD Anderson Medical Center in Houston, she qualified to become global trial patient No. 7 and the first woman in North America to be given Blinatumumab in hopes of achieving complete remission in order to be eligible for a bone marrow transplant.

The drug had an immediate and dramatic effect.

First, her fever spiked to 103 degrees. But by day three, she began to feel much better. Shortly into her trial with the drug, she contrasted its impact when she wrote in her blog,

“Blinatumumab has been very effective on my leukemia. In 15 days, I’ve gone from 69 percent cancer cells down to 2 percent,” Wyche wrote. “This is the best possible news; above and beyond everyone’s (and I really mean the doctors’) expectations! And, as the cancer cells continue to reduce, my normal white cells are beginning to rise. Although it’s a small increase (.6 parts per million to 1.2 ppm), it’s significant because they’re rising while I’m still undergoing treatment.

“With chemo, I would have had to come off of treatment before my counts would return to normal levels. We’ll see what my white cells continue to do throughout the week, if they hover around this 1.2 mark, if they fall or if they rise. For now, we’re celebrating this victory and making plans for transplant. I think it’s time to go handbag shopping!”

Blinatumumab is a monoclonal antibody drug. It works by attaching to specific receptor sites on the leukemic cells, much like tricking one’s body into thinking that you have a virus. The patient’s immune system then attacks the hybrid antibody/leukemic cells, killing them.

For Wyche, Blinatumumab provided a remarkable season of respite in her fight against leukemia, and gave her the opportunity to have the best chance for full recovery. She was able to enjoy two months of feeling good and achieved zero percent detectable cancer cells. On her 28th birthday. Wyche received a bone marrow transplant from an anonymous donor. The procedure was only possible because the Blinatumumab had succeeded.

But there is much work still to do to cure blood cancer. Even with the best care and most advanced drug technology available, Wyche died six months later, in October 2012, when her disease recurred in spite of the 100 percent engrafting of new blood stem cells and additional chemo therapy. After the ravaging side effects of so many standard cancer drugs with devastating implications to her immune system and the rest of her body, she was unable to fend off pneumonia. And with the drug still in trial, she was ineligible to receive Blinatumumab a second time around.

The FDA’s recent designation of Blinatumumab and the other three drugs for expedited review means that others with life-threatening blood disease may soon have long-term treatment success with these advanced therapies. Wyche and those who participate in experimental drug trials provide invaluable evidence for both the benefits and risks of these new drugs.

Since 1949, the society has invested more than $1 billion in research to advance

cancer therapies and save lives. Survival rates since the early 1960s have doubled, tripled and even quadrupled, thanks to research and access to better treatments. But the organization needs more help and is aiming to raise $300,000 in September.

“To achieve our goal of a world without blood cancers, [the society] must do more to invest in research to find cures,” said Piper Medcalf, executive director of the society’s Georgia chapter.

Information and donations: www.lls.org