

Health Bulletin



An Innovative Treatment For Non-Hodgkin's Lymphoma

(NAPSA)—Non-Hodgkin's lymphoma is a slow-growing, life-threatening cancer of the immune system that develops when white blood cells grow uncontrollably in the lymph nodes. Each year in the U.S. alone, 55,000 new cases are diagnosed. Fortunately, novel, highly personalized treatments are being produced. With a recent medical breakthrough, patients can now receive individualized treatment that kills cancerous cells while sparing normal, healthy cells.

Traditional treatments usually consist of chemotherapy and monoclonal antibody drugs, which, along with targeting cancerous B-cells, kill healthy white blood cells that comprise a major component of the immune system.

Biovest International is one of a few companies working on patient-specific cancer vaccines. Biovest's personalized therapeutic, BiovaxID, is currently being tested as a treatment for indolent (slow-growing) follicular B-cell non-Hodgkin's lymphoma, which affects 12,500 new patients in the U.S. each year. The vaccine could eventually be used to treat other cancers.

Personalizing BiovaxID begins with a sampling of cancerous cells from a patient's lymph nodes. On the surface of these cells are unique proteins, or antigens, detectable by the immune system. The doctor sends this sample of the patient's cancer cells to Biovest's laboratory in Worcester, Mass. Here, researchers mix the cells with another line of cells licensed from Stanford University. The cells fuse, releasing the antigen proteins.

As the patient undergoes chemotherapy to kill most of the cancer cells, Biovest collects and purifies the patient's antigen proteins, which, after chemical modification, form the active ingredient



A novel approach to treating non-Hodgkin's lymphoma is the use of a personalized cancer vaccine.

of the custom vaccine. The individualized vaccine is then sent back to the doctor, who injects it into the patient five times over six months.

"Typical treatments for non-Hodgkin's do not specifically target the tumor," explains Dr. Carl M. Cohen, Biovest Chief Operating Officer. "Our vaccine trains the patient's immune system to target a specific protein on the tumor cells—one found only on the tumor cells. BiovaxID only kills cancer cells. If you think of chemotherapy as a blunt instrument, our treatment is like tweezers."

Results from a Biovest study of 20 patients, begun at the National Cancer Institute a decade ago, show a 95 percent survival rate. Forty-five percent are still in remission. According to historical data, only about half the patients would have survived with conventional treatments. None would still be in remission. (The Biovest-treated patients remained disease-free for a median of eight years.)

Currently, Biovest is enrolling patients for a large-scale study to be held at several major U.S. and European medical institutions. The trial will include 460 patients. Company officials hope to obtain FDA approval for the vaccine by 2008.

To learn more about enrolling in the study, visit www.biovest.com or call toll free (877) 654-6052.