

Novel Lung Cancer Vaccine Trial Launched at Moores UCSD Cancer Center

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Oncologists at the Moores Cancer Center at the University of California, San Diego (UCSD) in La Jolla are hoping to stave off the relentless march of advanced lung cancer by treating patients with a novel kind of cancer vaccine. While many vaccines attempt to pump up the immune system to fight off a cancer, the new vaccine, Lucanix, is genetically engineered to also trick the cancer into turning off its immune system-suppressing activities.

The first patients have begun enrolling in a new clinical trial at the Moores UCSD Cancer Center testing the effectiveness of the vaccine. The trial will involve 700 patients at some 90 centers worldwide.

Current treatments for advanced lung cancer have limited effectiveness and new therapies are needed, said Lyudmila Bazhenova, M.D., director of the Lung Cancer Unit at the Moores UCSD Cancer Center and assistant clinical professor of medicine at UC San Diego School of Medicine.

"The future treatments for advanced lung cancer may involve combinations of chemotherapy and targeted agents, and possibly even biologicals such as this," she said.

Roughly 430 patients die of lung cancer every day in the United States, according to Bazhenova, making it the nation's number one killer, despite being the second most common cancer. "While breast cancer mortality has declined about 15 percent, there hasn't been much improvement in mortality in lung cancer in the past several decades," she said. According to the American Cancer Society, an estimated 215,000 new cases of lung cancer will be diagnosed, and 162,000 individuals will die from the disease this year in the United States.

The vaccine, developed by NovaRx, a biopharmaceutical company based in San Diego, consists of lung cancer cells that have been genetically altered to shut down the cancer's ability to depress the immune system. In addition, the cells are also modified to enable the immune system to see them better.

Bazhenova explained that earlier tests of the vaccine's effectiveness produced encouraging results. The current trial is for patients with stage four non-small cell lung cancer who have completed four to six cycles of platinum-based chemotherapy. Those patients who have had a response to the treatment, meaning either tumor shrinkage or stable disease, may be eligible. The trial is a double-blind, placebo-controlled study, where neither patients nor doctors know who is getting the vaccine and who may be receiving a placebo. Patients receive injections once a month for 18 months, after which they receive two quarterly injections and are treated until disease progression. The trial's main goal is to determine if the vaccine can improve patient survival compared to taking placebo.

For more information, visit the Moores UCSD Cancer Center web site, http://cancer.ucsd.edu/patientcare/clinicaltrials/study_details.asp?P=NR001-03 or contact UCSD Clinical Research Coordinator Peter Vu at 858-822-5354, pvu@ucsd.edu.

The Moores UCSD Cancer Center is one of the nation's 41 National Cancer Institute-designated Comprehensive Cancer Centers, combining research, clinical care and community outreach to advance the prevention, treatment and cure of cancer.

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