

New Lung Cancer Drug Shows Dramatic Results for Shrinking Tumors

Moores UCSD Cancer Center holding Phase III Clinical Trials

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Patients with a specific kind of lung cancer may benefit from a Phase III clinical trial offered by the Moores UCSD Cancer Center. The new drug, crizotinib, under development by Pfizer, showed dramatic results in reducing lung cancer tumors in some patients during Phase I and II clinical trials.

"The results of the first two trials have been very encouraging," said Lyudmila Bazhenova, MD, assistant clinical professor at UC San Diego School of Medicine and a member of the Moores UCSD Cancer Center. "The Phase III clinical trials will be critical in determining if this drug goes to market."

According to a preliminary study presented at the 2010 meeting of the American Society of Clinical Oncology, Phase I/II clinical trials demonstrated that 57% of patients had their tumors reduced and at eight weeks of the treatment, 87% showed disease stabilization.

In some patients with non-small cell lung cancer (NSCLC), the anaplastic lymphoma kinase (ALK) gene may move and fuse with another gene, EML4. The resultant fusion produces an enzyme that promotes lung cancer cell growth. This fusion happens in approximately four percent of NSCLC patients. The chances of a patient having the fusion gene increases if they have the adenocarcinoma subtype of lung cancer, or are non-smokers or former light smokers, among other characteristics. Those patients have an approximate 20% chance of having this mutation. Crizotinib inhibits the enzyme, allowing the cancer cells to die off.

The Phase III clinical trial will compare crizotinib with standard-of-care chemotherapy in the treatment of ALK-positive recurrent NSCLC. Through a randomized selection process, patients will either be treated with chemotherapy or crizotinib. If the patients who are given the chemotherapy do not respond to treatment, they will be given crizotinib at the end of the trial.

Candidates for the Phase III trial must have stage four NSCLC and have gone through at least one round of chemotherapy. If the patient qualifies for the study, they will be tested for the gene at the Moores UCSD Cancer Center. Potential candidates for the clinical trial should call the clinical trials hotline at (858) 822-5354.

According to the American Cancer Society, more than 220,000 new lung cancer cases will be diagnosed in the U.S. in 2010. Only four percent of those cases will qualify for this clinical trial, which equals approximately 9,000 patients for whom this drug may help stop the growth of cancer.

The Moores UCSD Cancer Center is one of the nation's 40 National Cancer Institute-designated Comprehensive Cancer Centers, combining research, clinical care and community outreach to advance the prevention, treatment and cure of cancer. For more information, visit http://health.ucsd.edu/cancer/

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