MedicalXpress

FDA approved drug extends survival for patients with rare cancer

January 12 2015

Sunitinib, an agent approved for use in several cancers, provides unprecedented antitumor activity in thymic carcinoma, a rare but aggressive tumor of the thymus gland, according to a phase II clinical trial led by a researcher at Georgetown Lombardi Comprehensive Cancer Center.

The study's results, published in *Lancet Oncology*, are the first to demonstrate a robust response in patients who had failed chemotherapy, the standard treatment for this cancer, says the study's senior investigator, Giuseppe Giaccone, MD, PhD, associate director for clinical research at Georgetown Lombardi.

"Disease control was achieved in over 90 percent of patients tested," says Giaccone. "This represents a significant advance in the care of these patients. More than half of the 24 patients who participated had failed two or more prior treatments."

Preliminary data from this study was presented at the 2014 annual meeting of the American Society of Clinical Oncology.

The median progression-free survival was seven-plus months, he added. Approximately 60 percent of patients were alive 18 months after treatment.

The research team included investigators from the National Cancer Institute, a part of the National Institutes of Health (NIH), Walter Reed

National Military Medical Center and Indiana University Medical Center.

Investigators also tested sunitinib in 16 patients with thymoma, a less aggressive form of cancer in the organ, but the agent doesn't show much activity, according to Giaccone.

Sunitinib has a number of targets that are involved in angiogenesis, such as VEGFR and PDGFRb. Growth of these vessels may play an important role in the aggressiveness of thymic carcinoma. Sunitinib was the first cancer drug simultaneously approved (in 2006) for two different indications—renal cell carcinoma and resistant gastrointestinal stromal tumor.

The scientists also found that sunitinib increases expression of a surface protein known as programmed cell death protein 1 (PD-1) in regulatory T cells, which was linked to longer survival. For this reason, Giaccone is planning a clinical trial to test a PD-1 antibody in patients with thymic carcinomas.

"Our research demonstrated why sunitinib is beneficial in thymic carcinoma, while also uncovering an approach that may offer even better results," Giaccone says. "Recently, remarkable activity has been observed in several solid tumors with antibodies that target PD-1 or its ligand PDL-1, including renal cell cancer, melanoma and non-small cell lung cancer."

Provided by Georgetown University Medical Center