Cabazitaxel with radiation and hormone therapy may improve prostate cancer survival
12 January 2012

Jefferson's Kimmel Cancer Center has started a Phase I clinical trial investigating the latest prostate cancer chemotherapy drug to extend survival, Cabazitaxel, in combination with radiation and hormone therapy. This first-of-its-kind multimodality approach could improve disease control and eventually survival for locally advanced prostate cancer patients.

The single-center, open-label, non-randomized Phase I study of weekly Cabazitaxel with concurrent intensity modulated radiation therapy (IMRT) and androgen deprivation therapy will test its safety and the tolerable maximum dosing.

Cabazitaxel was approved in the U.S. for second-line use in advanced hormone-refractory prostate cancer in men in 2010, and has been described as a major advance in chemotherapy for advanced prostate cancer. It extended overall survival by 2.4 months when compared with mitoxantrone in patients who were previously treated with docetaxel. However, a multimodality approach with the drug has never been studied.

"We know the drug is effective in prostate cancer, but there is no study with radiation and hormone therapy yet," said principal investigator Jianqing Lin, M.D., an assistant professor of medical oncology at Thomas Jefferson University Hospital. "Concurrent radiation may have a better control for localized disease, and better long-term survival for these high-risk patients."

IMRT is a type of 3-dimensional radiation therapy that uses computer-generated images to show the size and shape of the tumor; androgen deprivation therapy is a treatment to suppress or block the production or action of male hormones. Enrolled men will receive weekly treatments of the chemotherapy drug and hormone therapy and then every three months until two years after completion of IMRT.

For the clinical trial, Dr. Lin is partnering with co-investigator Timothy Showalter, M.D., an assistant professor in the Department of Radiation Oncology at Thomas Jefferson University Hospital.

Provided by Thomas Jefferson University