Novel Immunotherapy Targets Her2-Positive Prostate Cancer

A novel immunotherapy that directly links immune cells to Her2-positive prostate cancer cells shows the first documented responses to immunotherapy in prostate cancer. As in breast cancer, some prostate cancer cells produce excessive amounts of the Her2 protein that tells cells to divide, making the cancer particularly aggressive and unresponsive to hormone therapy.

A research team headed by Dr. Nicholas James, of the University of Birmingham, England, designed a trial that tested whether two different therapies can work together to rev up a patient's immune system enough to destroy Her2-positive prostate cancer cells. Patients were given a Her2 antibody intravenously as well as subcutaneous injections of a drug called GM-CSF (granulocyte-macrophage colony-stimulating factor), a growth factor that promotes production of immune system cells. The antibody was designed to attach to both the Her2-positive cancer and to the immune cells that could then kill the cancer cells.

Although James has tested versions of the therapy with 111 patient participants in two separate trials, this study reports on 25 patients who have taken the drug for the longest period of time in the second trial. In 70 percent of patients who showed a response, the PSA level either fell or its rise had slowed down. One-third of the patients reported less pain. Patients also reported very little toxicity, according to James. this is an initial stop in a strategy which, as a result of this study, no doubt will undergo further examination.