The Cancer Institute of New Jersey's
CANCER CONNECTION
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CINJ Offers Clinical Trial of Targeted Agent for Bladder Cancer

A recently opened clinical trial at CINJ is testing the effectiveness of a drug called sorafenib when combined with the drugs gemcitabine and carboplatin, which is a chemotherapy regimen commonly used in bladder cancer. It is thought that sorafenib may have activity against blood vessels, which nourish bladder tumors and may make current chemotherapy more effective. This study will test this combination by allowing patients to take sorafenib orally at the same time they are receiving chemotherapy. Patients with bladder cancer that is advanced may be eligible for the study, as long as they have not had chemotherapy for their advanced cancer (earlier forms of chemotherapy may be acceptable); if they have adequate kidney function; and if they meet other eligibility criteria. For more information on how to take part, individuals should call CINJ's Office of Human Research Services at 732-235-8675.

Male Sexual Function Comes Back Faster With New Surgical Procedure for Prostate Cancer Developed at CINJ

A new robotic surgical technique developed at CINJ for the removal of all or part of the prostate gland is showing what investigators call a "dramatic improvement" in a male's sexual potency rate. The results were recently presented at the 26th World Congress Endourology meeting in Shanghai, China. Robotic prostatectomy allows a surgeon to control a set of robotic arms that holds the surgical instruments in order to remove prostate cancer through several incisions that are smaller than a quarter. It allows for additional precision, reduced blood loss, shorter hospital stays and faster recovery for the patient. Isaac Kim, MD, PhD, who is the director of CINJ's Urologic Oncology Program and assistant professor of surgery at UMDNJ-Robert Wood Johnson Medical School, found a way to enhance the procedure, by developing a new technique known as Athermal Intrafascial Robotic (AIR) prostatectomy. In AIR prostatectomy, the nerve that controls a man's ability to have an erection is better preserved by sparing over 90 percent of the tissues that surrounds the prostate versus the 40 or 50 percent in the conventional open or robotic radical prostatectomy. Additional tissues that are located at the top of the prostate are nearly impossible to spare during an open prostatectomy due to the presence of a major vein called the dorsal venous complex. Typically with the conventional method, the sexual potency rate is between 65 and 75 percent at one year following the surgery. With the AIR procedure, investigators at CINJ found the potency level was at 91 percent nine months post surgery. At the nine-month mark for the conventional robotic method, the potency rate was only 67 percent.

Researchers Explore Effects of Circadian Rhythms in Shift Workers to Prevent Breast and Prostate Cancers

Researchers at The Cancer Institute of New Jersey recently received $600,000 in funding from The V Foundation for Cancer Research to study whether shift work predisposes individuals to cancer by altering the body's response to hormones and if a dietary supplement could help. The V Foundation Grant in Translational Clinical Research will support the work of the team led by Helmut Zarbl, PhD, ATS, associate director for Public Health Science at CINJ, and professor of toxicology at UMDNJ-Robert Wood Johnson Medical School, in the area of cancer prevention and circadian rhythms. Circadian rhythms are best described as one's "body clock," which controls sleep, hunger, hormones, and activity among other things in all living cells. Epidemiological studies have consistently shown that women and men, who serve the community by working at night, have a

significantly elevated risk of breast cancer and possibly prostate cancer. In fact, shift work that alters circadian rhythm is now classified as a probable carcinogen by the International Agency for Research Cancer. Zarbl and his team have recently found that chemical carcinogens also disrupt circadian rhythm, leading to what he considers an imbalance in a protein that prevents cancer by regulating the cell's response to hormones. More importantly, they found that a naturally occurring compound, methylselenocysteine (MSC), found in many foods such as brazil nuts, prevents cancer in rats by restoring circadian rhythm and the cell's response to estrogens. During the course of the three-year grant period, the team will conduct blood work on two different study groups of participants engaged in various shift work professions to determine if their work also disrupts the cell's response to estrogens, and if this effect can be reversed by dietary MSC. If so, the results will form the basis for a prospective study to determine if MSC supplements can prevent breast and prostate cancer in those who serve the community by working at night.

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