

N.J. researcher to unveil future treatment implications for ovarian cancer

New research findings from a top clinical investigator at The Cancer Institute of New Jersey (CINJ) indicate the potential for more targeted treatment of ovarian cancer, which is expected to claim more than 15,000 lives nationwide this year, with 480 in New Jersey. The study, which was to be presented at the 44th annual Meeting of the American Society of Clinical Oncology (ASCO) in Chicago in May, looks at the effects of a mineral called selenium in combination with the standard treatment for the disease. CINJ is a Center of Excellence of UMDNJ-Robert Wood Johnson Medical School.

Currently, the standard of care involves the drugs carboplatin and paclitaxel, which have shown the ability to shrink ovarian cancer tumors; however, that shrinkage may not last for a long period due to the development of drug resistance. Previous data shows that selenium inhibits the development of a tumor's resistance to carboplatin. The current study couples selenium with the two drugs with the goal of preventing or slowing drug resistance.

According to lead author Lorna Rodriguez, M.D., Ph.D., chief of gynecologic oncology at CINJ and associate professor of obstetrics, gynecology and reproductive sciences at UMDNJ-Robert Wood Johnson Medical School, the study of 30 patients so far shows that selenium can be safely given in combination with carboplatin and paclitaxel. Furthermore, she notes, selenium may help treatment efficacy as indicated by four patients having complete disappearance of disease, and eight patients having their tumors decrease in size by more than 30 percent. The results show that a serum marker may predict which women will benefit from selenium therapy.

Dr. Rodriguez notes the findings could finally lead to more tailored treatment. "Because symptoms of ovarian cancer are often silent, many

patients who are diagnosed with the disease are usually in an advanced stage. Having such a targeted treatment available to these patients could very well mean a longer survival outcome and increased quality of life."

The CINJ team, which includes gynecologic oncologists Darlene Gibbon, M.D.; Mira Hellmann, M.D.; Wilberto Nieves-Neira, M.D.; and Ami Vaidya, M.D.; director of pharmacy, Susan Goodin, Pharm.D., FCCP, BCOP; pharmacologist Murugesan Gounder, Ph.D.; and research teaching specialist Neelakandan Muthukumar is planning phase two studies for patients with ovarian and endometrial cancers in the future.

Rodriguez will be among the more than 30,000 cancer specialists from around the globe who will showcase advances in clinical research at the annual ASCO meeting.

