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Colon Cancer Patients Who Stop Chemotherapy Double Death Rate

New research indicates that as many as 30 percent of patients with stage III colon cancer who were prescribed six months of chemotherapy with a combination of 5-fluorouracil and leucovorin stopped their treatment prematurely. Stopping chemotherapy for colon cancer was shown to be equivalent to receiving no treatment at all. The findings add to the arsenal of reasons why colon cancer patients, and all cancer patients, need to complete their chemotherapy regimens whenever possible.

Previous studies have shown that not completing chemotherapy regimens for breast cancer is associated with shorter survival. This is the first study to look at a link between mortality rates from colon cancer and treatment adherence.

"The intuitive thinking is that if you complete most of a treatment regimen, you should get most of the treatment benefit," said Alfred I. Neugut, MD, PhD, professor of **Epidemiology** and the Myron M. Studner Professor of Cancer Research in Medicine at Columbia University Medical Center. "These findings are significant because they indicate that completing treatment is as critical for colon cancer as it is for breast cancer- and we need to do better to ensure that patients who can complete treatment as intended." Dr. Neugut led the study along with Dawn L. Hershman, MD, MS, assistant professor of Medicine and Epidemiology at the Columbia University College of Physicians and Surgeons in the Division of Medical Oncology.

The research team used the Surveillance, Epidemiology, and End Results (SEER)-Medicare database to identify stage III colon cancer patients who were at least 65 years of age or older, and who received one to seven months of fluorouracil (FU)-based adjuvant chemotherapy treatment.

Among the 1,579 patients who survived eight months or longer, the 1,091 (69.1 percent) who underwent five to seven months of treatment survived nearly twice as long as the 488 (30.9 percent) who received only one-to-four months of treatment. Patients who were older, unmarried, and had comorbid conditions, were more likely to receive less than five months of treatment.

Dr. Neugut also serves as head of Cancer Prevention and Control for the Herbert Irving Comprehensive Cancer Center, and co-director of the Cancer Prevention Center of New

York Presbyterian Hospital/Columbia. He sees patients as an attending physician in medical oncology at NewYork-Presbyterian Hospital/Columbia and Harlem Hospital Center, an affiliate institution of Columbia University Medical Center.

Dr. Hershman, co-lead author, is co-director of the Breast Program for the Herbert Irving Comprehensive Cancer Center at Columbia University Medical Center and NewYork-Presbyterian Hospital/Columbia, and an assistant attending physician in medical oncology at New York-Presbyterian Hospital/Columbia specializing in breast cancer. Additional members of the Columbia University Medical Center research team included: Judith S. Jacobson, DrPH, assistant professor of clinical Epidemiology; Wei-Yann Tsai, PhD, professor of **Biostatistics**; Victor R. Grann, MD, MPH, clinical professor of Medicine and Epidemiology and **Health Policy and Management** at the College of Physicians & Surgeons and Mailman School of Public Health; Matthew Matasar, MD, former instructor in clinical Medicine; Xiaoyan Wang, MA, staff associate in Epidemiology; and Russell McBride, a doctoral student in epidemiology.

The same research team recently published (*Journal of Clinical Oncology*, Sept. 20, 2005 issue) the first study to link treatment completion issues with race and poor survival rates. The 2005 study found that black women with early stage breast cancer were more likely than their counterparts of other races to abandon chemotherapy before completing their full course of treatment. The findings shed new light on why black patients with breast cancer experience lower survival rates than other women, despite a lower incidence.

The **study** appears in the May 20, 2006 issue of the *Journal of Clinical Oncology*.