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## **FEATURE ARTICLE**

## Capecitabine: A New Adjuvant Option for Colorectal Cancer

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Colorectal cancer continues to pose a major public health threat in the United States. Without postsurgical adjuvant therapy, approximately 50% of patients will have recurrent disease and die within five years. Since 1990, five new chemotherapy agents have been added to the therapeutic armamentarium for management of colorectal cancer, and agents traditionally used to treat metastatic and advanced disease increasingly are being applied in the adjuvant setting. One such treatment, capecitabine, offers patients the benefit of oral dosing and permits at-home self-management. A phase III randomized trial, Xeloda® in Adjuvant Colorectal Cancer Treatment, demonstrated that treatment with single-agent capecitabine was equivalent to bolus 5-fluorouracil with leucovorin with respect to disease-free survival and overall survival, with significantly less diarrhea, stomatitis, neutropenia, nausea and vomiting, and alopecia. This article reviews the findings and discusses how oncology nurses can help provide effective education and monitoring for patients using oral treatment in the adjuvant setting.

olorectal cancer (CRC) constitutes the third most common cancer affecting Americans (American Cancer Society, 2005). Dramatic strides have been made in therapeutic options for people diagnosed with CRC, including new agents, new regimens, and, most importantly, the refinement and expansion of adjuvant approaches by building on the success of established regimens used in later-stage disease. This article describes the epidemiology of CRC, the established approaches for adjuvant treatment, and the impact that oral therapies such as capecitabine have on nursing practice and patient care.

## **Colorectal Cancer Overview**

Despite recent improvements in survival, CRC still ranks second as a cause of cancer death in the United States (Jemal et al., 2006), and, in 2006, the disease is expected to constitute 6% (145,290) of new cancer diagnoses and 10% (56,290) of cancer deaths. The incidences for men and women are similar, with lifetime CRC risks of 1 in 17 for men and 1 in 18 for women (American Cancer Society, 2005). Although women tend to have a higher incidence of colon cancers, men are diagnosed more frequently with rectal tumors. Mortality is similar for both genders.

The specific causes of CRC are unknown, but risk factors for the disease are listed in Table 1 (Jemal et al., 2006). For survival, the single most important prognostic factor is the stage of CRC at the time of diagnosis (American Cancer Society, 2005). The highest five-year survival rate is among the 90% of patients who present with early localized disease. Unfortunately, a significant number of patients present with disease that already has spread regionally (37%) or to distant sites (25%) (American Cancer Society).

## At a Glance

- Colorectal cancer continues to be the second leading cause of cancer death in the United States.
- Capecitabine is an oral agent with demonstrated efficacy in colorectal cancer.
- Diarrhea and palmar-plantar dysesthesia, side effects of treatment, require careful nursing care.

ety). Survival is about 66% when the disease has spread only to adjacent organs or lymph nodes. Patients with disease that has spread only regionally are candidates for adjuvant therapy.

Historically, the standard adjuvant chemotherapy regimen was 5-fluorouracil (5-FU) plus a biomodulating agent, initially levamisole, currently leucovorin (LV). Since 1990, five new chemotherapy agents—capecitabine (Cassidy & Scheithauer, 2004), oxaliplatin (Andre et al., 2004), irinotecan (Douillard et al., 2000), bevacizumab (Hurwitz et al., 2005), and cetuximab (Saltz et al., 2004)—have been approved for the management of metastatic CRC. As regimens using newer agents have improved

Deborah T. Berg, RN, BSN, is a medical science liaison at Genentech BioOncology in Derry, NH. No significant financial relationship to disclose. Mention of specific products and opinions related to those products do not indicate or imply endorsement by the *Clinical Journal of Oncology Nursing* or the Oncology Nursing Society. (Submitted October 2005. Accepted for publication November 21, 2006.)

Digital Object identifier: 10.1188/06.CJON.479-486