

# Expanded Treatment Options in the Adjuvant Therapy of Colon Cancer: Implications for Oncology Nurses

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**Purpose/Objectives:** To review the role of adjuvant therapy in the treatment of patients with colon cancer.

**Data Sources:** Published articles, Internet sources, and books.

**Data Synthesis:** Colon cancer is a very common cancer in men and women. Chemotherapy, consisting primarily of 5-fluorouracil, has been used to treat colon cancer since the 1950s, but additional effective agents against metastatic disease now are available. The options for adjuvant chemotherapy have increased dramatically. Ongoing studies are evaluating the role of biologics in adjuvant therapy of colon cancer.

**Conclusions:** Use of oxaliplatin in the adjuvant setting has further defined exciting new therapy options for patients with colon cancer.

**Implications for Nursing:** Oncology nurses caring for patients with colon cancer should be aware of new changes in therapy options. Although the addition of new therapies increases the tools in the drug arsenal for the common disease, management of toxicities of therapy is crucial as well. This article reviews changes in therapy options and toxicity management, including discussion of key issues for oncology nurses in the care of patients with colon cancer.

Colon cancer is the third most common cancer in men and women in the United States. The disease is one of the leading causes of cancer mortality and is responsible for about 200,000 deaths per year in Europe and the United States (Nicum, Midgley, & Kerr, 2003). Although the cancer occurs frequently, the death rate has decreased since the mid-1980s, probably because of a combination of factors, including better screening and earlier detection and, more recently, improved treatments (Sargent & Murphy, 2003). Chemotherapy options for patients diagnosed with advanced and metastatic disease have changed considerably. In addition to the approval of several new agents for metastatic colon cancer that have increased patient survival, effective new adjuvant therapy options have become available. The U.S. Food and Drug Administration (FDA) has approved new therapeutic approaches that are further improving survival in this population of patients.

## Pathogenesis of Colon Cancer

A sequence of events has to occur for individuals to develop colon cancer; the disease generally develops over decades with multiple genetic occurrences (Williams et al., 2003). Adenomas undergo changes that may cause development into carcinomas (Nicum et al., 2003). Because the process can take many years, screening for colon cancer is of the utmost importance.

## Key Points . . .

- Colon cancer is the third most common cancer in men and women in the United States.
- More than half of patients with colon cancer who show no sign of macroscopic disease after surgery die of recurrence or distant metastasis.
- Recent trial results have shown considerable improvement in patients with colon cancer receiving adjuvant therapy with oxaliplatin-based chemotherapy.
- Oxaliplatin recently was approved by the U.S. Food and Drug Administration for the adjuvant treatment of patients with colon cancer, and oncology nurses should be aware of treatment advances for this population.

Adenocarcinomas are malignant tumors of epithelial origin, stemming from the glandular epithelium of the colon mucosa. Adenocarcinomas infiltrate the tissue, moving into muscularis mucosae, the submucosa, and, if not removed, the muscularis propria. The tumors may present as well, moderately, or poorly differentiated. About 15% of colon cancers occur in inherited patterns, including familial adenomatous polyposis (FAP) and hereditary nonpolyposis colon cancer. One of the initiating steps in colon carcinogenesis may be a mutation of the adenomatous polyposis coli tumor suppressor gene (the cause of FAP) (Williams et al.). Further identification of genes involved in the pathogenesis of colon cancer is under way.

## Risk Factors for Colon Cancer

Risk factors for colon cancer are varied; family history, age, gender, and ethnicity have been implicated (Sargent & Murphy, 2003). The disease affects more men than women and is found

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Digital Object Identifier: 10.1188/06.ONF.81-90