

## Oxaliplatin (for adjuvant treatment of colorectal cancer)

### Product:

OXALIPLATIN (Eloxatin®)

### Class of drugs:

Antineoplastic

### Indication:

Adjuvant treatment of colorectal cancer

### Manufacturer:

sanofi aventis Canada Inc.

## CED Recommendation

The CED recommended that oxaliplatin (Eloxatin) be funded through Cancer Care Ontario's New Drug Funding Program for the adjuvant treatment of colorectal cancer according to specific criteria. The CED's recommendation was made on the basis that oxaliplatin (Eloxatin) has been demonstrated to provide both therapeutic benefit and value for money for this indication.

## Executive Officer Decision

Based on the CED's recommendation, the Executive Officer decided to fund oxaliplatin (Eloxatin) through Cancer Care Ontario's New Drug Funding Program for the adjuvant treatment of colorectal cancer according to specific criteria.

## Status

Funding available through Cancer Care Ontario's New Drug Funding Program.

### Highlights of Recommendation:

- ◆ Oxaliplatin (Eloxatin) is a chemotherapy drug used in the treatment of colorectal cancer (colon cancer and rectal cancer).
- ◆ This particular review considered the funding of oxaliplatin (Eloxatin) in a combination regimen for the adjuvant treatment of colorectal cancer. Adjuvant treatment is given to decrease the risk of cancer recurrence after the tumour is removed by surgery.
- ◆ The standard adjuvant therapy for colorectal cancer had been intravenous 5-fluorouracil (5-FU). A large study now supports the combination use of oxaliplatin (Eloxatin) with 5-FU as the standard adjuvant therapy for colorectal cancer.
- ◆ In one study, a combination regimen containing oxaliplatin (Eloxatin) and 5-FU (called the FOLFOX regimen) was compared against 5-FU alone. The study found that patients who were on the FOLFOX regimen had lower risks of cancer recurrence compared with patients on 5-FU alone.
- ◆ A very common side effect with oxaliplatin is peripheral neuropathy (pain, numbness, tingling, swelling and muscle weakness in various parts of the body). Other side effects include low blood cell count, nausea, vomiting and diarrhea.
- ◆ The FOLFOX regimen costs approximately \$1,500 per treatment cycle. An economic evaluation demonstrated that this regimen provides value for money in the adjuvant treatment of colorectal cancer.
- ◆ **Overall, the Committee agreed that oxaliplatin (Eloxatin) in the FOLFOX regimen has been demonstrated to provide clinical benefit and value for money in the adjuvant treatment of colorectal cancer.**

### Background:

Colorectal cancer refers to cancer of the colon (bowel) and cancer of the rectum. When colorectal cancer is diagnosed, tests are done to determine the type of colorectal cancer, the stage of the cancer (i.e. how far the cancer has progressed) and the grade of the tumour. This information is then used to determine the best treatment for the patient.

Of relevance to this review of oxaliplatin (Eloxatin) is the stage of the patient's disease; in particular, patients with high-risk stage II or stage III colorectal cancer. Stage II colorectal cancer is one that has spread outside the colon or rectum to nearby tissues, and stage III colorectal cancer is one that has spread to nearby lymph nodes. Stage III patients are at greater risk of recurrence and death than stage II patients. After surgery to remove the tumour, patients with stage III colorectal cancer are usually offered adjuvant therapy to decrease the risk of cancer recurrence. Adjuvant therapy is not routinely offered to patients with stage II colorectal cancer, except for stage II patients with high-risk features for cancer recurrence.

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## Detailed Discussion:

- ◆ In the MOSAIC study (*Andre et al. New England Journal of Medicine 2004*), combination oxaliplatin (Eloxatin) and 5-FU (i.e. the FOLFOX regimen) was compared against 5-FU alone in the adjuvant treatment of colon cancer in patients with stage II and stage III disease. The study reported that the FOLFOX regimen was associated with a significant 3-year disease-free survival advantage (i.e., significantly more patients on the FOLFOX regimen were free of cancer recurrence at 3 years) compared to 5-FU alone.
- ◆ Although the MOSAIC trial was conducted in patients with colon cancer and there is no direct evidence to support the adjuvant use of the FOLFOX regimen in rectal cancer, the Committee indicated that it is likely that patients with rectal cancer would derive the same benefits from the FOLFOX regimen. This is because colon cancer and rectal cancer are biologically similar and demonstrate the same risk and pattern of recurrence. Patients with advanced rectal cancer are generally treated and respond to the same chemotherapy agents as patients with advanced colon cancer.
- ◆ In terms of side effects, the FOLFOX regimen was associated with higher rates of adverse events compared to 5-FU alone. Peripheral neuropathy is a frequent side effect with the FOLFOX regimen. Other common side effects include neutropenia (low white blood cell count), thrombocytopenia (low platelet count), anemia, nausea, diarrhea, vomiting, fatigue, and stomatitis (mouth sores).
- ◆ The FOLFOX regimen costs approximately \$1,500 per treatment cycle. An economic evaluation demonstrated that the FOLFOX regimen provides reasonable value for money in the treatment of stage III and high-risk stage II colorectal cancer.
- ◆ Overall, the Committee noted that oxaliplatin (Eloxatin) in the FOLFOX regimen has been shown to provide superior efficacy compared to 5-FU alone in the adjuvant treatment of colon cancer. This clinical efficacy would likely be extended to patients with rectal cancer. Furthermore, an economic analysis has demonstrated that the FOLFOX regimen is cost-effective when used as adjuvant therapy in patients with stage III and high-risk stage II colorectal cancer.
- ◆ The Committee recommended that oxaliplatin (Eloxatin) for the adjuvant

treatment of stage III and high-risk stage II colorectal cancer be funded according to the following criteria:

- *For the adjuvant treatment of completely resected stage III colon or rectal cancer where oxaliplatin (Eloxatin) is given in combination with 5-FU and folinic acid in the regimens known as FOLFOX.*
  - *For the adjuvant treatment of completely resected high-risk stage II colon or rectal cancer where oxaliplatin (Eloxatin) is given in combination with 5-FU and folinic acid in the regimens known as FOLFOX. High-risk stage II colon cancer is defined if any of the following are present: obstruction, perforation, poorly differentiated adenocarcinoma, inadequate lymph node sampling or T4 tumour.*
- ◆ The CED worked jointly with a subcommittee involving cancer experts to review this cancer drug, as is done for all other cancer drug treatments.

## Cancer Care Ontario (CCO) Information:

Information on CCO regimens for colorectal cancer may be found at:

[http://www.cancercare.on.ca/index\\_chemoRegimensbyDisease.htm](http://www.cancercare.on.ca/index_chemoRegimensbyDisease.htm)

The colorectal Disease Site Group Program in Evidence-Based Care Guideline for oxaliplatin (Eloxatin) in colorectal cancer is available at:

<http://www.cancercare.on.ca/english/toolbox/qualityguidelines/diseasesite/gastro-ebc/1>



Ministry of  
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