

## [Results of SC.23](#)

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### **Results of Canadian Cancer Trials Group SC.23 show that dexamethasone lowers the rate of pain flare in cancer patients with bone metastases undergoing radiation therapy for symptom control.**

The results of Canadian Cancer Trials Group SC.23 show that dexamethasone reduces radiation-induced pain flare in cancer patients with painful bone metastases. Dr. Edward Chow, trial co-chair and radiation oncologist at Sunnybrook Health Sciences Centre in Toronto, presented these findings yesterday at the American Society for Radiation Oncology's (ASTRO's) 57th Annual Meeting.

Patients with cancer that has spread (metastasized) to their bones can experience debilitating bone pain. While radiation therapy (RT) is commonly used to treat patients with bone metastases to lessen this pain, it can also temporarily cause pain flare, a worsening of the pain, in some patients. The trial, led and conducted by the Canadian Cancer Trials Group, was a double-blind study that compared the effectiveness of dexamethasone, a steroid which aids in controlling inflammation, to a placebo in reducing the incidence of pain flare. The study also looked at toxicity (side effects) and the impact on the patients' quality of life.

A total of 298 patients with bone metastases were enrolled in the study from 23 Canadian centres. Patients were treated with a single 8 Gy fraction of RT to one or two bone metastases and were randomized to receive either 8 mg of oral dexamethasone daily for five days beginning on the first day of radiation or placebo.

Patients reported their worst pain scores before RT and daily for 10 days after RT. They completed the European Organization for Research and Treatment of Cancer Quality of Life Questionnaires QLQ-C15-PAL and QLQ-BM22, and the Dexamethasone Symptom Questionnaire at baseline and again at 10 and 42 days after RT. Ninety-nine percent of patients completed the questionnaires at baseline and 82 percent at days 10 and 42.

The results showed that patients in the dexamethasone group experienced fewer episodes of pain flare than the placebo group. Additionally, when the dexamethasone group did have pain flare, they reported that their pain was less severe than that of the placebo group. The results also showed that at 10 days post treatment, patients in the dexamethasone arm were statistically significantly improved compared to patients in the placebo group in regards to nausea, functional interference, and appetite when compared to their levels at baseline.

“Based on our results, we recommend that patients who are scheduled to receive radiation therapy to control painful bone metastases also receive a short course of dexamethasone to reduce the risk of experiencing an acute pain flare,” says Dr. Chow.

These results were also published in the *Lancet Oncology* and were presented by Dr. Alysa Fairchild, co-chair and radiation oncologist at the Cross Cancer Institute in Edmonton, as part of ASTRO's Press Program.

“We are grateful to all of participating centre staff who worked so hard to get this trial up and running and for making the trial available to their patients. We are especially grateful to all of the patients who volunteered to participate in the trial which will help reduce pain and improve the quality of life of cancer patients in Canada and around the world,” says Dr. Janet Dancey, Director of the Canadian Cancer Trials Group.

<http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045%2815%2900199-0/abstract>  
[https://www.astro.org/News-and-Media/Media-Resources/Press-Kits/Annual-Meeting-2015/briefings2015\\_3.aspx](https://www.astro.org/News-and-Media/Media-Resources/Press-Kits/Annual-Meeting-2015/briefings2015_3.aspx)

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### **About the Canadian Cancer Trials Group**

*The Canadian Cancer Trials Group, a national research program of the Canadian Cancer Society, is the only Canadian cooperative cancer trials group conducting the entire range of cancer trials from early phase (e.g. phase I-II) studies to large international randomized controlled (e.g. phase III) trials across all cancer types. Its primary mission is to assess the effectiveness of interventions to prevent the development of cancer or improve the care of those patients who do develop cancer. Its Central Operations and Statistics Office is located at Queen’s University in Kingston, Ontario.*