



SCOT: 3 versus 6 months of chemotherapy for bowel cancer

The SCOT trial has helped researchers answer an important health question about bowel cancer treatment. Its results may change the way some bowel cancers are treated in the future. We acknowledge and appreciate the part played by our volunteer participants. Without them, this trial would not have been possible. Here is a summary of the trial and results.

What was the trial about?

Chemotherapy that uses platinum compounds is used to treat many different kinds of cancer, including bowel cancer. A standard chemotherapy drug for bowel cancer, called oxaliplatin (Eloxatin), is one of the drugs given after the operation to remove the bulk of the cancer. It is given for 6 months to reduce the risk of the cancer returning.

Oxaliplatin can cause nerve damage. The most common symptom is numbness and tingling in the hands and feet. It may get worse over time with more courses of treatment. Patients having oxaliplatin sometimes have to stop because of these side-effects.

The SCOT trial was designed to find out whether chemotherapy over 3 months would be as effective as 6 months. Participants were randomly allocated to 3 or 6 months of chemotherapy. This was given every 3 weeks.

SCOT recruited 6088 participants from Australia, New Zealand, UK, Denmark, Spain and Sweden. Their average age was 65, and 60% were men. They had stage III or high-risk stage II bowel cancer. Their doctors judged that they needed chemotherapy to reduce the risk of it returning.

The chemotherapy treatment was decided on by the doctor before randomisation. 4017 people had oxaliplatin with capecitabine (Capox, also called Xelox), an intravenous infusion plus tablets. 1981 had oxaliplatin with fluorouracil and leucovorin (Folfox), an infusion plus injections.

How was the effect of treatment measured?

The participants had regular visits to the oncologist and had blood tests each time, during their treatment and for several years afterward. They also filled in questionnaires about their symptoms and their quality of life.

Participants had CT scans at the end of 6 months and several times after that.

The important results for the trial were whether the treatment stopped the cancer and what the side-effects of the treatment were.

Was 3 months of treatment as good as 6 months?

After 3 years, 740 in the 3-month group and 742 in the 6-month group had a new appearance of bowel cancer. These similar numbers mean that statistically, over all patients, 3 months was as good as 6 months of treatment.

The two chemotherapy treatments had different ingredients, with slightly different results. Three months of Capox treatment was as beneficial as 6, but this was not statistically so for Folfox. Also, for participants with higher-risk cancers, 3 months was not as beneficial as 6 months.

What were the side-effects of the treatment?

Participants who had 6 months of treatment reported worse symptoms than those having 3 months of treatment.

A year after treatment started, participants who had had 6 months of treatment still had worse nerve symptoms, but their general quality of life and health was much the same as for the people who had had 3 months of treatment.

Damage to nerves increased with time on treatment. By 3 months, 24% of all participants had numbness, pain or other sensations in hands or feet, but by 6 months, this had increased to 56%.





16% of participants stopped their chemotherapy before 3 months. About half the time, the reason for stopping was the effect of the treatment.

Were there any serious side-effects causing hospital admission?

Approximately 16% of people having 6 months of treatment had serious problems related to nerve damage. Only 4% of those having 3 months of treatment had these problems.

31 people (0.5%) died as the result of treatment side-effects.

What does this mean for trial patients?

In general, the risk of cancer relapse was treated just as well by 3 months of chemotherapy. Participants who were given 3 months of chemotherapy instead of 6 had less toxic effect on their nerves.

Both durations of treatment were generally safe and well tolerated.

How will the results help patients and doctors in future?

The SCOT trial has shown that for many people who have had bowel cancer surgery, 3 months of chemotherapy will be enough. Doctors will consider each patient and their individual cancer.

The data from SCOT have already been analysed with data from 6 other smaller trials—in Italy, United States, Canada, France, Japan and Greece—making up over 12,800 patients in total. This study is called the IDEA Collaboration.

The results of IDEA have been able to show which subgroup of patients at lower risk are likely to do just as well with 3 months of treatment. Where a patient is considered to have a higher risk, 6 months of treatment may be better.

What will the researchers do next?

The blood samples and tumour tissue provided by participants, with their permission, will be used to look for individual biological differences that might have affected a patient's progress.

The samples will also be used in laboratory research to learn more about bowel cancers and how oxaliplatin works.

Where can I find out more about the trial?

Talk with your GP or oncologist.

The results have been presented at a scientific conference

Iveson T, and others. Final DFS results of the SCOT study: an international phase III randomised non-inferiority trial comparing 3 versus 6 months of oxaliplatin-based adjuvant chemotherapy for colorectal cancer. *American Society of Clinical Oncology*; 2–6 Jun 2017; Chicago. Summary

Trial registration

Australian New Zealand Clinical Trials Registry ACTRN12609000662268

Australasian Gastro-Intestinal Trials Group

Link to summary of the trial in Australia

The sponsor in Australia was the Australasian Gastro-Intestinal Trials Group. SCOT was funded by the Cancer Clinical Trials Unit in Scotland, Cancer Australia, and the National Health and Medical Research Council.

Some of the investigators have received research funding or have had advisory roles for drug companies, including Sanofi, manufacturer of Eloxatin. Full disclosures are listed with the results here.

Results of any clinical trial do not represent complete knowledge about treatment. Patients should not change their therapy on their understanding of the result.