

# Chemotherapy reduces breast cancer deaths by a third

December 6 2011

---



(Medical Xpress) -- Today's chemotherapy treatments reduce deaths from breast cancer by around a third in a wide range of patients, a giant new analysis of data from over 100 different clinical trials has shown.

That's the main finding from a new analysis led by Oxford University researchers published in the [Lancet](#) medical journal.

The Early [Breast Cancer](#) Trialists' Collaborative Group collected all the individual patient data from 123 randomized trials which compared [chemotherapy](#) following surgery for breast cancer against no chemotherapy. The trials from over the past 40 years have involved some 100,000 women.

The researchers found that standard 1980s chemotherapy regimens could

produce a reduction of almost a quarter in breast cancer mortality.

Recent trials of more modern chemotherapy courses compared to the older forms of treatment found a further reduction of about one-sixth in breast cancer deaths.

The researchers conclude that, compared with no chemotherapy, modern regimens reduce breast cancer deaths by about a third.

How much individuals benefit from this one-third reduction in risk depends on how big their risk was to begin with without chemotherapy.

Chemotherapy can have severe side-effects during the course of treatment, and can sometimes cause permanent damage. It is only given when there is a substantial risk of the cancer recurring without the chemotherapy.

The size and invasiveness of a tumor can help predict the risk of the cancer coming back without chemotherapy. This can indicate how much individual patients would stand to benefit – it would be a one-third reduction in that initial risk of recurrence.

The reduction in risk appeared to apply to all women. It was the same irrespective of age, how big the tumour was, whether the cancer had started to spread to the lymph nodes, and whether or not the cancer was ‘oestrogen-receptor (ER)-positive’.

The risk of an ER-positive breast cancer causing death can be reduced substantially by five years of [endocrine therapy](#), which is generally much less toxic than chemotherapy. The present results show, however, that in ER-positive disease chemotherapy plus endocrine therapy was more effective than endocrine therapy alone.

Professor Sir Richard Peto of the Clinical Trial Service Unit at Oxford University, and one of the leaders of the Early Breast Cancer Trialists' Collaborative Group since the 1980s, said: "Most breast cancers are ER-positive, and for ER-positive disease that appears to have been completely removed by surgery, the 10-year risk of recurrence and death from breast cancer can be reduced by at least half by giving a combination of a few months of modern chemotherapy plus five years of endocrine therapy."

Professor Peto adds: "Britain has had the best decrease in the world in breast cancer mortality, partly because of earlier detection and better local control, but partly because of increasingly wide use of endocrine therapy and chemotherapy."

Provided by Oxford University

Citation: Chemotherapy reduces breast cancer deaths by a third (2011, December 6) retrieved 23 April 2024 from

<https://medicalxpress.com/news/2011-12-chemotherapy-breast-cancer-deaths.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--