Alliance Public Study Result Summary

What this study is about

This pancreatic cancer study compared two treatments for people whose cancer could not be removed by surgery.

The full title of this study is: CALGB 80303—A randomized phase III trial of gemcitabine plus bevacizumab (NSC#704865, IND#7921) versus gemcitabine plus placebo in patients with advanced pancreatic cancer

Why the study was done

This study compared two treatments for people with pancreatic cancer that could not be removed by surgery. Half the patients got two drugs combined, gemcitabine (Gemzar®) and bevacizumab (Avastin®) and was called G+B. The other half got gemcitabine and placebo (a non-active agent) and was called G+P.

Gemcitabine is a chemotherapy drug known to attack cancer cells as they divide to create new cells. It is a common treatment for pancreatic cancer. Bevacizumab is a drug that stops cancer cells from growing by cutting off their blood supply.

The goal of this study was to see which treatment would help patients with this kind of pancreatic cancer live longer.

Study results

Patients in both groups lived about the same amount of time, no matter which treatment they got.

- The study found there was no gain from bevacizumab for patients with advanced pancreatic cancer.
- Patients in Group 1 (G + B) had more side effects such as high blood pressure.
- About half of the patients in Group 1 (G + B) lived less than 6 months, and about half lived more than 6 months.
- Patients who were sicker when they started treatment died earlier. About half of the sicker patients (average) lived less than 3 months, compared to almost 8 months for those who were less sick when they started treatment.

Results from related studies

The results below are from studies that used blood and body samples (specimens) from patients who enrolled in the CALGB 80303 study and agreed to join these sub-studies.

Sub-study #1: This sub-study looked at genes in patients who were treated on the *CALGB* 80303 study.
Early clues showed that patients who have regular IL-17F genes may live longer than those who do not. Results from sub-study #1 are listed here:

- Only certain patients had a change in a gene called IL-17F. They died earlier than patients with a regular IL-17F gene. The kind of treatment did not make a difference.
- The level of pain, worries and mood got better with treatments for patients in this study.
- How well patients took care of themselves got worse even if their cancer shrank.
- Vitamin levels did not effect the time patients lived without cancer growing (progression-free survival) or how long people lived (overall survival).

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Sub-study #2: This sub-study looked at how changes in genes related to Vitamin D in pancreatic cancer. Prior studies suggested that the vitamin D gene called VDR might be related to pancreatic cancer. Results from sub-study #2 are listed here:

- The way the VDR gene works and changes can impact the length of time pancreatic cancer patients live (overall survival or OS). Survival (OS) is improved when the VDR gene acts with vitamin D before treatment.

What the results mean

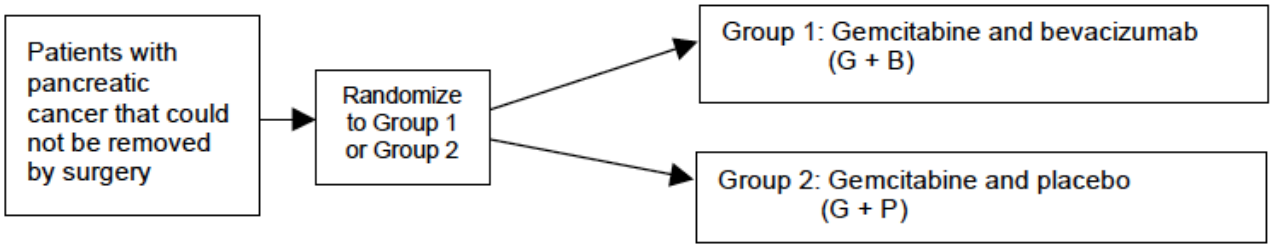
The results of the 80303 study mean that the combined treatment of gemcitabine and bevacizumab (G + B) is not better than gemcitabine (G) for patients with pancreatic cancer that cannot be removed by surgery.

How long these pancreatic cancer patients live depends on how well they feel when they start treatment. More studies are needed before the sub-study results could be used in treatment choices.

How the study worked

Patients were put into two groups, by chance (randomized) to reduce differences between the groups. This was done because no one knew if one treatment was better than another.

Here is a picture that explains how patients were placed into one of the two groups.



Two smaller studies (sub-studies) were also offered to these patients, and some patients took part in them. One study looked to see if patients lived longer if they were able to care for themselves when they started treatment. The other study looked for clues in genes related to Vitamin D to see who might live longer.

When did the study start and end? The study started in June 2004. All patients were enrolled by April 2006.

How many patients joined? 535 patients were treated on the study. 279 got gemcitabine and bevacizumab (G + B), and 256 were treated with gemcitabine only (G).

Talk to your doctor if you want more information about this study.

Scientific publications about this study

Details about the study can be found in these articles:

- Gemcitabine plus bevacizumab compared with gemcitabine plus placebo in patients with advanced pancreatic cancer: Phase III trial of Cancer and Leukemia Group B (CALGB 80303) Kindler HL, Niedzwiecki D, Hollis D, Sutherland S, Schrag D, Hurwitz H, Innocenti F, Mulcahy

MF, O'Reilly E, Wozniak TF, Picus J, Bhargava P, Mayer RJ, Schilsky RL, Goldberg RM *Journal of Clinical Oncology volume 28, number 22, page 3617-3622 August 1, 2010*.

- 25-Hydroxyvitamin D levels and survival in advanced pancreatic cancer: findings from CALGB 80303 (Alliance). Van Loon K, Owzar K, Jiang C, Kindler HL, Mulcahy MF, Niedzwiecki D, O'Reilly EM, Fuchs C, Innocenti F, Venook AP *J Natl Cancer Inst. 2014 Aug 6;106(8). pii: dju185. doi: 10.1093/jnci/dju185. Print 2014 Aug*.

To learn about this trial, visit the ClinicalTrials.gov website at https://clinicaltrials.gov/ct2/show/NCT00088894?term=CALGB+80303&rank=2

This study was sponsored by the Cancer and Leukemia Group B (CALGB) which is part of the Alliance for Clinical Trials in Oncology – a national cooperative network that runs large cancer clinical trials. The Alliance is supported by the National Cancer Institute (NCI) and brings researchers together to develop better treatments for cancers. More information about the Alliance is at http://www.allianceforclinicaltrialsinoncology.org.

This summary lists what is known about this research study as of February 2015. New Information may be available.

We thank the people who joined this study and made it possible. *This study could have been completed faster if more people who had the opportunity to participate would have done so. If you know people who are offered the chance to join a cancer clinical trial, please encourage them to enroll. We do research to try to learn the best ways to help patients. The people who joined this study helped us to do that.*

Thank you for your interest in learning more about cancer research advances. We appreciate your advocating for federally-funded research to your elected representatives.