ECOG-ACRIN
cancer research group

EA2142 Clinical Trial Results Summary

Testing If One Chemotherapy Combination is Better Than Another for High Grade Neuroendocrine Cancers

What did this trial involve and who was it for?

EA2142 was a research trial for people with neuroendocrine cancer of the gastrointestinal (GI) tract or pancreas. This type of cancer affects neuroendocrine cells, which are also found throughout the body beyond the GI tract. These cells release hormones when they receive signals from the brain and nerves. Generally, by the time that neuroendocrine cancers are diagnosed, the cancer is at an advanced stage, treatment is difficult, and survival rates are low.

The usual treatment for this type of cancer is chemotherapy with the drugs etoposide and either cisplatin *or* carboplatin (referred to as “platinum therapy”). Unfortunately, the cancer often comes back (recurs) after this initial treatment. Any follow up treatment step after recurrence is usually to switch to chemotherapy with the drugs temozolomide and capecitabine.

The purpose of EA2142 was to compare initial treatment with etoposide and platinum therapy versus temozolomide and capecitabine. Researchers looked to see which combination helped patients live longer and without their cancer worsening.

EA2142 was open to enrollment from November 2015 to April 2021, and a total of 67 people participated in the trial. Participants were randomly assigned by a computer to one of two treatment groups:

1. The study approach: capecitabine and temozolomide, or
2. The usual approach: etoposide and platinum therapy.

Patients received their assigned treatment until their cancer worsened or side effects became too severe.

What are the results?

- EA2142 showed that patients who received the study approach did not have improved survival compared to patients who received the usual approach.
    - Patients who received the study approach had an average of 2.4 months on treatment before their cancer worsened and survived for an average of 12.6 months.
    - Patients who received the usual approach had an average of 5.4 months on treatment before their cancer worsened, and their overall survival time was similar at 13.6 months.
- However, serious side effects were less common in patients who received the study approach versus patients who received the usual approach.
    - 29% of patients who received the study approach experienced serious side effects, compared to 66% of patients in the usual approach group, where the most common serious side effects were lowered blood counts.

What do the results mean for patients?

- The study treatment approach using capecitabine and temozolomide was not significantly better than the usual approach using etoposide and platinum therapy.

This summary lists what is known about this research study as of February 2026.
New information may be available.

NCI National Clinical Trials Network
a National Cancer Institute program

- However, there were significantly fewer serious side effects among participants in the study approach group.
- More research is needed to find improved therapies for patients with gastrointestinal neuroendocrine cancer.

For more information, go to:

- United States National Institutes of Health (NIH) Library of Medicine: https://clinicaltrials.gov/study/NCT02595424
- *Journal of Clinical Oncology*: https://ascopubs.org/doi/abs/10.1200/JCO.2022.40.16_suppl.4020

About ECOG-ACRIN

This trial was led by the ECOG-ACRIN Cancer Research Group (ECOG-ACRIN). ECOG-ACRIN is a membership-based scientific organization that designs and conducts cancer research involving adults who have or are at risk of developing cancer. ECOG-ACRIN is a component of the National Cancer Institute's National Clinical Trials Network. Learn more at www.ecog-acrin.org.

To all the patients that participated in this trial, thank you. Your participation, and that of other patients like you, made this research possible.