# Dual-action drug produces positive results in patients with advanced neuroendocrine tumors, trial finds

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A drug that simultaneously strikes cancer cells' growth circuits and pipeline to the bloodstream produced encouraging results in a clinical

trial involving patients with advanced neuroendocrine tumors, according to a study led by Dana-Farber Cancer Institute investigators.

Jennifer Chan, MD, MPH, director of the Program in Carcinoid and Neuroendocrine Tumors at Dana-Farber, will present the findings of the CABINET trial at the annual European Society for Medical Oncology (ESMO) Congress on October 22, 2023, in Madrid, Spain. Chan is first author on the study. Jeffrey Meyerhardt, MD, MPH, co-director of the Colon and Rectal Cancer Center at Dana-Farber, is senior author.

Patients treated with the drug, cabozantinib, survived significantly longer with no worsening of their disease than patients who received a placebo. The results suggest cabozantinib, which has been approved by the U.S. Food and Drug Administration for some patients with renal cell carcinoma, hepatocellular carcinoma, or thyroid cancer, can benefit patients with neuroendocrine tumors that continue to grow and spread after previous treatment, researchers say.

More than 12,000 people in the United States are diagnosed with a neuroendocrine tumor each year. The tumors begin in neuroendocrine cells—which have characteristics of nerve and hormone-producing cells—and can arise in multiple sites in the body, most often in the gastrointestinal tract, lungs, and pancreas. Treatments may include surgery, targeted therapy, peptide receptor radionuclide therapy, chemotherapy, or other local treatment approaches depending on the location and stage of the cancer. For patients whose cancer continues to grow and spread after these treatments, better options are urgently needed.

"Although advances have been made in recent years, there remains a critical need for new and effective therapies for patients with advanced neuroendocrine tumors, particularly patients whose cancer has progressed on currently available options," said Chan. "Targeting

angiogenesis and other growth factor pathways with cabozantinib represents a novel treatment strategy."

Cabozantinib undermines tumor cells in multiple ways. It blocks the receptor for VEGF, a protein used to tap into the body's blood supply, as well as other receptors including c-MET, AXL, and RET that are key to tumor cell survival and metastasis.

The study enrolled 197 patients with advanced extra-pancreatic neuroendocrine tumors (which arise outside the pancreas) and 93 patients with pancreatic neuroendocrine tumors. Patients were enrolled at sites within the National Cancer Institute (NCI)-funded National Clinical Trials Network (NCTN). Two-thirds of the participants were randomly assigned take a 60 mg cabozantinib pill daily, and the others were given a placebo, or inert pill.

Researchers measured progression-free survival (PFS)—how long patients lived before their disease worsened—for all participants. At a median follow-up of 13.9 months, the PFS for patients with extra-pancreatic tumors who took cabozantinib was 8.3 months, compared to 3.2 for those who took a placebo. At a median follow-up of 16.7 months, patients with pancreatic tumors who took cabozantinib had a PFS of 11.4 months, compared to 3.0 months for those who took a placebo.

Side effects of cabozantinib were similar to those found in other studies of the drug. These include hypertension, fatigue, diarrhea, and skin rash.

"The results of the CABINET trial are very encouraging," said Chan. "Cabozantinib significantly improved outcomes in patients with previously treated extra-pancreatic and pancreatic neuroendocrine tumors and may become a new treatment option for patients."

**More information:** Alliance A021602: Phase III, Double-Blinded

Study of Cabozantinib Versus Placebo for Advanced Neuroendocrine Tumors (NET) After Progression on Prior Therapy (CABINET), October 22, 2023, European Society for Medical Oncology (ESMO) Congress

Provided by Dana-Farber Cancer Institute