Researchers from the Mayo Clinic Comprehensive Cancer Center and the Mayo Clinic Center for Individualized Medicine are studying a rare genetic condition called Familial Adenomatous Polyposis (FAP), looking for potential ways to prevent colorectal cancer in the general population at an earlier more treatable stage. The researchers' findings are published in *Gut*.

"Colorectal cancer is the third most common cancer in the U.S. and a precursor for this cancer is the development of polyps in the colon," says Niloy Jewel Samadder, M.D., a gastroenterologist at Mayo Clinic in Arizona. He says FAP is a rare genetic condition that begins with the development of hundreds of colorectal polyps that may eventually become cancerous.

"The biological pathway that leads to the development of polyps and colon cancer in patients with FAP is the same biological pathway as patients in the general population," says Dr. Samadder. "Our trial looked at opportunities to use chemoprevention agents in patients with FAP to inhibit the development of precancerous polyps in the small bowel and colorectum."

Researchers found that using the drug erlotinib, which blocks a specific cancer pathway called EGF, led to a 30 percent reduction in the number of polyps formed in the bowels of patients with FAP.

"We are now studying whether these findings can be expanded to the broader patient population that has either genetic or other risk factors that increase their chances of developing small bowel or colorectal cancer," says Dr. Samadder.

**More information:** N Jewel Samadder et al, Phase II trial of weekly erlotinib dosing to reduce duodenal polyp burden associated with familial adenomatous polyposis, *Gut* (2022). [DOI: 10.1136/gutjnl-2021-326532](https://doi.org/10.1136/gutjnl-2021-326532)