Federally Funded Cancer Clinical Trials Play a Vital Role

The federal government supports research that receives less funding from industry, including trials for rare and pediatric cancers.

October 31, 2025 By Liz Highleyman, adapted from ASCO

Federally funded cancer trials provide needed support for essential areas of cancer care that are not well funded by pharmaceutical companies, including early-phase research, multimodality treatments, dose de-escalation studies and trials for rare malignancies and pediatric cancers, according to research presented at the 2025 American Society of Clinical Oncology (ASCO) Quality Care Symposium.

“Federally funded cancer clinical trials play an important role in evaluating interventions and improving cancer outcomes in settings and populations that are not prioritized by industry,” ASCO chief medical officer and executive vice president Julie Gralow, MD, said in a news release. “With more than 18 million cancer survivors in the United States, federal research has delivered an undeniable return on investment. To ensure healthier futures, we must continue to invest in the research that advances prevention, detection, and treatment.”

Joseph Unger, PhD, of Fred Hutchinson Cancer Center, and colleagues analyzed data from the National Institutes of Health’s ClinicalTrials.gov registry from 2008 to 2024 to identify trials based in the United States that included drugs or biological agents for cancer treatment. (The research was funded by the Hope Foundation for Cancer Research.)

The studies were categorized by funding type (federal versus industry) and by trial phase, intervention type, age of participants and whether it involved dose de-escalation or a rare cancer type. De-escalation trials, introduced in the 1970s, have become more common in the age of precision medicine and aim to safely reduce the intensity, duration or dose of cancer therapies to minimize toxicities, side effects and cost while maintaining effectiveness.

A total of 10,142 cancer clinical trials were included in the analysis. Of these, 1,711 (16.9%) were federally funded, while 8,431 (83.1%) were industry funded. Government-funded trials, compared with industry trials, more often involved rare cancers (17.8% versus 12.3%) and cancers in children (16.2% versus 5.1%).

Federally funded studies were more likely to be early and mid-stage (Phase I or II) clinical trials, which assess pharmacokinetics, optimal dose, safety, tolerability and preliminary efficacy (87.3% versus 82.0%). Industry studies, in contrast, were more often Phase III trials, which test new therapies in larger populations to collect safety and effectiveness data to support regulatory approval (18.0% versus 12.7%).

What's more, federally funded studies were less likely than industry studies to be single-agent drug trials (50.8% versus 79.9%). Instead, government-funded studies more often involved complex multimodality drug or biological agent combinations (20.2% versus 7.7%) or combined drugs or biologicals with radiation (11.0% versus 1.5%), surgery (2.6% versus 0.2%), transplantation (1.5% versus 0.1%) or a mix of modalities (1.9% versus 0.1%). The federal government also funded more dose de-escalation trials compared with industry (3.2% versus 0.4%).

The researchers next plan to examine how the increasing dominance of industry-sponsored cancer trials over the past few decades is shaping the kinds of studies patients can access. The aim of this future research is to identify gaps and ensure that both federally funded and industry-funded and studies will serve patients better.

"Federal trials fill critical gaps left by industry, especially in early-phase research, multimodality treatments, rare cancers and treatments for children. The trials that address these types of research questions are vital for patients and their families, even if the outcomes of such trials are not profitable for private companies," Unger said. "Sustained or increased funding is essential to maintain progress in these areas and to maintain a healthy cancer research ecosystem that balances federally sponsored and industry-sponsored trials."

A separate study at the meeting looked at the geographic distribution of federally funded cancer clinical trials.

"A 2024 ASCO analysis found that 70% of U.S. counties lacked cancer trials. In 2025, seeking to identify factors associated with geographic access to trials, the ASCO Health Services Research Committee conducted a study to characterize the relationship between federal investment in research and geographic availability of U.S. cancer treatment trials," said study coauthor Ishwaria Subbiah, MD, of the Sarah Cannon Research Institute.

"We found that more than a quarter of the 903 counties with trials had only federally sponsored trials and most rural and high cancer mortality counties with trials had only federally-sponsored trials. Additionally, counties with sites supported by NCI-infrastructure awards were far more likely than counties without site support to have trials funded by any sponsors," she continued. "The results of this study illustrate that federal funding is underpinning the robust network of cancer clinical trials offered in the United States and many patients with cancer—especially those living in rural areas and areas with high cancer mortality—depend on federal trial sponsorship to have the opportunity to participate near home."

This report is adapted from a news release published by the American Society of Clinical Oncology.