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## Less Than 1 in 5 Cancer Trials Are Published

**A medical journal article says the results of many clinical trials in cancer research are never published, maybe because they show the drug or treatment didn't work**

by [John Carey](#)

Clinical trials are crucial to advances in medical science. Researchers test new drugs or treatments in patients and report on what they find. In turn, companies, scientists, and doctors learn what works and doesn't work.

But a major problem with this process has emerged. Many results are never published, especially when clinical trials show that a drug or treatment didn't work. So the medical community remains in the dark over what was learned.

This clinical trial blackout is a huge problem in cancer research, according to a [paper just published in \*The Oncologist\*](#). Dr. Scott Ramsey and his postdoctoral researcher Dr. John Scroggins at the Fred Hutchinson Cancer Research Center in Seattle downloaded the complete list of clinical trials in the National Institutes of Health's registry. Then they searched for scientific papers reporting the results of those trials.

### Research Not Completed

The results were "disturbing," Ramsey says. Less than 1 in 5 clinical trials were published in peer-reviewed journals. "I knew that there was underpublication," but not to that degree, he says. And when it came to trials sponsored by industry, the rate was even lower: Just 1 in 20 is published. "We were really shocked by that," Ramsey says.

One reason why some trials never get reported is that they never are completed. It might not have been possible to recruit enough patients, for example.

But scientists say the more worrisome reason may be that trials are suppressed when results were negative—the drug or treatment being studied didn't work or caused unforeseen problems, or the idea being tested didn't pan out. That can be enormously valuable knowledge to researchers and doctors, especially if the drug or treatment being studied is already in clinical use.

## Journals Nix Negative Results

Why aren't these negative studies published? There are powerful incentives not to do so, researchers say. For scientists, the best path to career advancement, grant money, and fame is making a bold advance. "The coin of the realm is reporting a splashy result," says Dr. David F. Ransohoff, professor of cancer epidemiology at the University of North Carolina.

The same can be said of science journals, which vie to get the most important papers—and the most media attention. "There are some journals which say, 'If you have negative results, we don't want to publish them,'" Ransohoff says. "It's dysfunctional." The prestigious *New England Journal of Medicine*, for instance, almost never accepts a paper on a study that didn't show positive results, Ramsey says. Karen Pedersen Buckley, an *NEJM* spokeswoman, disputes that assessment, saying the journal "often" publishes negative studies.

And if the spoils in the academic world more often accrue to those who report splashy results, the situation in industry is even more extreme. "Industry has even less incentive to publish negative studies," Ramsey says. Think of what happens to a company's stock when word gets out that a promising drug failed in clinical trials.

## Lost Insight

Ramsey's next step is to go back and ask the investigators involved in unpublished trials why the results were never written up—and what those results were. Until then, "I can't tell you how much to worry," he says.

But his current findings raise serious concerns: What if some of those unpublished trials shed important new light on existing cancer drugs? Perhaps a trial revealed that a drug caused previously unknown side effects. Or perhaps the drug didn't extend the life of cancer patients. That's particularly worrisome, given that many expensive new drugs have only modest survival benefits, adding at best a few months of life. If those benefits didn't turn up in other trials of the same drug, then "not only are we wasting lots of money, but we'd be giving patients false hopes about the value of the products," Ramsey says.

The good news is that solutions to this problem are coming. "It is a clinical and ethical necessity" that results of important trials—positive and negative—get published, writes Dr. James H. Doroshow of NIH's Div. of Cancer Treatment & Diagnosis in an accompanying commentary in *The Oncologist*. A law passed by Congress last year requires that all trials be registered. And over the next several years, the reporting of the results of those trials will also be required. Such steps are "long overdue," Doroshow writes. Once those requirements are in place, the medical community will get a much better understanding of which medicines and treatments work—and which don't.

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