

# The New York Times

## Benefit of End-Stage Chemotherapy Is Questioned

By: Pam Belluck July 23, 2015

It is an excruciating question for [cancer](#) patients with a prognosis of only months to live. Should they try another round of [chemotherapy](#)?

Guidelines for oncologists say no for very sick patients, those who are often bedridden and cannot handle most daily needs themselves. But for patients who are more self-sufficient, [chemotherapy](#) is considered a reasonable option. Despite its well-known toxic side effects, many end-stage patients and their doctors have considered chemotherapy worth trying, believing it may ease discomfort or buy time.

Now, a study suggests that even those stronger patients may not benefit from end-of-life chemotherapy — and that for many, their quality of life may worsen in their final weeks compared with patients who forgo last-ditch treatment.

“It worsened quality of life for those that are relatively healthy, and those are the ones that the guidelines support treating,” said Dr. Charles D. Blanke, a medical oncologist at Oregon Health and Science University, who was not involved in the study. “Chemotherapy is supposed to either help people live better or help them live longer, and this study showed that chemotherapy did neither.”

The study, [published Thursday in JAMA Oncology](#), followed 312 adult patients with a prognosis of six months or less to live. The patients, in six oncology clinics across the country, all had solid-tumor cancers that had metastasized. The types included lung, colon, pancreatic and [breast cancer](#). About half opted for end-stage chemotherapy.

After each died, researchers asked the relative or caregiver most knowledgeable about their well-being to rate the patient’s physical and psychological distress and overall quality of life in their last week of life. (The caregivers’ views were considered reliable because their assessment at the study’s outset matched the patients’ own quality-of-life assessments.)

For patients who were sicker at the start, caregiver ratings of their last week’s quality of life were similar whether they received chemotherapy or not. But for the 122 patients with fewer initial symptoms, the results were striking. Of those receiving chemotherapy, 56 percent were reported to have lower quality of life in their last week, compared with 31 percent of those who did not have chemotherapy.

Holly G. Prigerson, a director of the Center for Research on End-of-Life Care at Weill Cornell Medical College and the study’s principal investigator, said she and colleagues had expected “the exact opposite.”

“The real kicker is it’s the people who are performing well, who are thinking they’re going to benefit, that didn’t,” she said.

Perhaps healthier patients might feel greater dismay from the side effects because they had “further to fall,” said Dr. Blanke, who [co-wrote an editorial](#) about the study.

Researchers also said there was no difference in survival between chemotherapy and non-chemotherapy groups. However, the study was not devised to measure survival, and experts cautioned against relying on those observations.

Some oncologists said that while the study tackled a difficult question carefully, patients and doctors should avoid generalizing based on its results. Dr. Thomas E. Gribbin, an oncologist in Grand Rapids, Mich., noted that patients were seen between 2002 and 2008, before some newer chemotherapy drugs with fewer side effects or the ability to directly target certain tumors or [cancer](#)-causing mutations.

“Doctors have been learning who not to treat, and I think this captures what we did 10 years ago,” Dr. Gribbin said. “A lot of the chemicals we would use today are not necessarily toxic to every organ in your body. And we have improvement in how we manage side effects.”

Most important, he and others said, is that chemotherapy advice to patients should be highly individualized.

“Some patients desire to live as long as possible, some people are looking for excellent quality of life all along, and some people want to hang on three months till their daughter’s wedding,” Dr. Gribbin said.

Dr. Lowell E. Schnipper, chairman of the task force on value in cancer care for the American Society of Clinical Oncology, said the organization’s guidelines, which were based on chemotherapy’s likelihood of diminishing end-stage tumors, “not the likelihood of improved quality of life,” should remain for now. But he added that future guideline discussions would likely consider quality-of-life studies.

“I’m not ready to have a public proclamation saying the default position is no therapy unless every salvageable option is investigated and undertaken,” said Dr. Schnipper, clinical director of the Beth Israel Deaconess cancer center in Boston. But he said the results supported the need to study treatment effects on well-being and to have candid conversations with patients. “What we really want to know is not if it gives you an extra six weeks, but were those six weeks like being in hell, or pretty good, or three of them were wonderful,” he said.

Christopher Johnson, who died in 2012 at 39 from a rare [kidney cancer](#), received late-stage chemotherapy because he “wanted to do anything he could to prolong his life,” said his mother, Ritchie Johnson, of Sugar Land, Tex. Looking back, she said, she would have advised against it because he had “huge side effects” and “the tumors were still growing.”

“The quality of life was just not there,” she concluded.

Joana Muckalli of Brooklyn, whose [ovarian cancer](#) spread brutally, chose “chemo after chemo” until shortly before her death last year at 53, said her daughter, Voula. Mrs. Muckalli “wanted to prolong the chemotherapy” partly to see the birth of her first grandchild, her daughter said, sobbing as she recalled how, hours before she died, her mother told the baby, “Grandma loves you so much.”

“To our family, it seemed the only option,” she said, and “we don’t regret it.”

The new study was not a randomized trial, which might be ethically impossible, experts said. And some potentially useful information was either unavailable or not reported, including the type of chemotherapy and patients’ previous treatment history.

Why some chose end-of-life chemotherapy was unclear, although patients who did were more likely to have pancreatic or [breast cancer](#) and to be younger, more educated, healthier and treated in academic medical centers.

Quality of life in the last week was assessed with three broad questions, providing only a snapshot. Dr. Prigerson said future studies should include monthly assessments with more detailed questions.

Oncologists said it was important to realize that patients’ situations and desires can change.

A [pancreatic cancer](#) patient of Dr. Gribbin’s, Brian Whalen, 75, has so far chosen chemotherapy. Its side effects are tolerable, he said, and he has survived months longer than initially predicted.

But, he said, “I am not getting better, and I do not expect to.”

If side effects worsen or he becomes more disabled, Mr. Whalen said he would stop treatment: “I will not go out miserable. I would hope to be able to smile until my last day.”