Cancer and Quality of Life: Drugs That Don’t Make Life Better

The way we develop new treatments for cancer is only beginning to incorporate quality-of-life issues.

March 14, 2019 By Jennifer L. Cook

No one would argue with the benefit of a drug that cures a specific kind of cancer. Learning that you are cancer-free is perhaps the ultimate boon to quality of life. And new kinds of cancer drugs, now being approved at a rapid clip, often do offer lifesaving breakthroughs.

But the regulatory and financial incentives for developing new cancer drugs can also lead to new drugs coming to market that do little to lengthen life—and even less to improve quality of life.

When new treatments work, the results can be miraculous. Targeted therapies that treat cancer with specific genetic characteristics, for example, have led to extraordinary outcomes, including cures. Take Gleevec (imatinib) a targeted drug for chronic myeloid leukemia (CML) that was approved by the Food and Drug Administration (FDA) in 2001. Before then, only about 30 percent of people with CML lived five years. Now, the five-year survival rate is 90 percent. And 10-year survival exceeds 80 percent. Indeed, a person who has been in remission for two years has the same life expectancy as one who never had cancer.

But new cancer drugs don’t always improve survival—and even fewer improve quality of life. A 2015 study in JAMA Internal Medicine found two thirds of new uses of cancer drugs approved between 2008 and 2012 showed no evidence of improvement according to either of those measures. Similarly, a 2017 study of new cancer drugs approved by the European Medicines Agency found that only about a third showed evidence of helping patients live longer—with a survival benefit ranging from one to 5.8 months—and only about 10 percent had evidence showing improved quality of life.

One reason for the slow progress in developing treatments that improve both survival and quality of life may be the way pharmaceutical companies are investing the majority of their research dollars. In 2014, in an influential lecture published in JAMA, Tito Fojo, MD, a medical oncologist at the Herbert Irving Comprehensive Cancer Center at Columbia University Irving Medical Center in New York, and colleagues noted that huge amounts of time, money and resources were being spent on drugs that are simply slightly altered versions of already successful therapies designed to get FDA approval. The result, they argued, was a stifling of innovation in drug development. Over

the past five years, it has only gotten worse, Fojo says. He would like to see a system develop that encourages pharmaceutical companies to take “10 shots at a goal and score once” in lieu of the current system, which takes “10 shots at a goal with something that is going to give me another of something I already have.”

How to reform our drug development process is the subject of enormous debates. These are still early days in the development of new drugs that can sometimes cure previously incurable cancers, and the excitement surrounding the emerging treatments may have partly overshadowed concerns for patient quality of life. But that’s changing. A growing chorus of voices is arguing for the importance of quality-of-life issues in drug development, including better ways to measure patient experiences. It begins by listening to patients—at the very beginning of the drug development process.

Next: The Promise of Patient-Centered Research.
