Companies pressured by social-media appeals seek fair way to allocate last-ditch treatments.

**Panel tackles ‘compassionate use’**

BY SARA REARDON

Nancy Goodman wanted to spend as much time as possible with her dying child. But even as ten-year-old Jacob’s brain cancer worsened, Goodman spent months contacting pharmaceutical companies that were developing drugs that might help him.

‘Compassionate-use’ laws in the United States allow pharmaceutical companies to provide unapproved drugs to patients in desperate need, but many firms provide little or no information on how to request these treatments. They are often reluctant to supply drugs in response to such pleas, especially if drug stocks are limited, although media campaigns on behalf of individual patients can sometimes embarrass firms into providing unapproved treatments. Anecdotes suggest that money and connections are also influential.

Now, ethicists and medical experts are testing what they hope is a fairer system to distribute drugs in short supply. The approach, presented on 6 June at the American Society of Clinical Oncology meeting in Chicago, Illinois, is inspired by the method used to prioritize organ transplants. In a test case, researchers worked with Janssen Pharmaceuticals to determine how to distribute limited supplies of daratumumab, an experimental drug intended to treat multiple myeloma.

The 10-person panel combed through 76 anonymized applications to determine how likely the drug was to work for each person, ultimately approving 60. “It’s hard to say no, because people die,” says Arthur Caplan, a bioethicist at New York University’s Langone Medical Center who is leading the effort. But he says that a systematic approach could help companies to make unbiased decisions.

In Goodman’s case, six of the eight companies that she contacted never responded. The NSF has not yet decided how it will save that 20%.

Later this year, the agency will solicit bids to manage the OOI for the next five to ten years. Who responds, and with what suggestions, will help to determine what gets cut. “We built this thing, and will be funding operations for what the community feels is best,” says Murray.

Ultimately, there is no metric for what constitutes a successful OOI. Ulses says that the project needs to run for a full year before managers can assess which scientists are using which data, and how stable and successful the data streams are.

Weller would like to see a set of OOI measurements become as iconic as the records of atmospheric carbon dioxide levels taken at Mauna Loa, Hawaii, since the 1950s. “On any given day, I step back,” he says, “and am still sort of amazed that it’s all out in the water and most of it’s working.”
other two declined to give her son their drugs because the treatments had never been tested in children. Jacob died in 2009, and his mother went on to found the advocacy group Kids v Cancer in Washington DC.

There are many legitimate reasons that companies might refuse to provide unapproved drugs, says Aaron Kesselheim, who studies health-care ethics at Brigham & Women’s Hospital in Boston, Massachusetts. People who request such treatments are often very ill, and companies worry that their deaths while receiving the drug would reduce the compound’s chances of approval from the US Food and Drug Administration (FDA). Giving patients access to experimental drugs could also discourage them from enrolling in controlled trials that might assign a placebo, and would leave less drug available for use in the trial.

“These requests are some of the most difficult decisions I face as a physician,” says Amrit Ray, chief medical officer of Janssen in Titusville, New Jersey. “It’s a trade-off we have to consider carefully.”

Since 2014, 28 US states have enacted ‘right-to-try’ laws, which allow companies to provide drugs to patients without involving regulators. Caplan calls these “feel-good” laws, because the FDA approves most of the compassionate-use requests that it receives. (It is not clear how many applications are denied by companies and never reach the FDA.)

Vickie Buenger, president of the advocacy group Coalition Against Childhood Cancer in Philadelphia, Pennsylvania, says that right-to-try statutes contribute to patients’ misunderstanding about the factors that go into a decision to supply or deny access to a drug. “It implies that companies and the FDA are either angels of mercy if they come through, or devils who have no compassion if they withhold it.”

This lack of clarity, and poor communication by companies, has led many patients and their families to launch social-media campaigns to secure unapproved drugs.

Perhaps the most famous case came in 2014, when the family of seven-year-old Josh Hardy began a Facebook campaign for an unapproved antiviral drug called brincidofovir to treat a life-threatening infection. Its manufacturer, Chimerix of Durham, North Carolina, had declined, on the grounds that giving the drug to Josh — and any subsequent petitioners — would leave less of the compound available for an ongoing clinical trial. Within days, the Facebook page and Twitter campaign #savejosh were featured on national television. Chimerix quickly created a small clinical trial with Josh as its first patient.

“Every single CEO woke up the next morning and said, ‘Oh my gosh, that might happen to me,’” says Elena Gerasimov, who directs a programme at Kids v Cancer that helps parents of children with cancer to petition companies for drug access. (The FDA is attempting to make this process easier. On 2 June, it released new forms to simplify the filing of compassionate-use appeals.)

Former Chimerix chief executive Kenneth Moch says that dozens of companies have since enlisted him as an adviser on such issues. His advice is simple: every company should create a transparent system to handle compassionate-use requests, guided by the FDA. That is in line with the advice of the Biotechnology Innovation Organization, an industry group in Washington DC that encourages its members to develop clear policies to explain whether they provide expanded access and to help physicians to request drugs. “That’s the least we can do, to facilitate people being able to contact us,” says Kay Holcombe, the group’s senior vice-president for science policy.

Caplan and Ray plan to test their system on another treatment later this year — possibly a mental-health drug or a childhood vaccine. Caplan hopes that more companies will adopt the approach, and imagines eventually creating a compassionate-use consulting panel to aid small companies.

Moch cautions that the approach might not be appropriate for every drug or company, but he likes how it helps to level the playing field. “Had Josh been a 37-year-old guy who kicked his dog and smoked, he wouldn’t have gotten the same support as a lovely seven-year-old boy,” he says.

Patient advocates also support Caplan’s system for distributing drugs. “Putting it in the hands of people who understand the drug’s possibilities is a reasonable thing,” Buenger says.

But many also want the FDA to create incentives for companies to provide drugs for compassionate use. Until that happens, or until companies adopt programmes such as Caplan’s, social-media campaigns and other public appeals may be some patients’ only option. “I’d do it,” Goodman says. “I’d do anything to save my kid — anything to give Jacob a few more months.”

Josh Hardy received an experimental drug after his family launched a massive social-media campaign.