on Clinical Cancer Research discussed two programmes, both planned for launch next year, that will aim to capture data from a subset of those experiments. The intent is to provide databases for researchers to mine — looking not just for potentially effective treatments, but also for cellular clues as to why individual cancers are resistant or susceptible to drugs.

"It's going to be what we learn from our patients that leads us back to understanding the cancer biology," says Vincent Miller, chief medical officer of Foundation Medicine, a company in Cambridge, Massachusetts, that provides genetic profiles of tumours.

Although it is legal for physicians to prescribe drugs off-label in the United States, such use is often controversial, and drug-makers pay steep fines if they promote their products for unapproved uses.

STANDARD PRACTICE

Off-label drug regimens are woven into the fabric of cancer care and are expected to become more prevalent as treatments become more tailored to the genetics of individual tumours. But genetics is not everything: drugs can be approved only for the cancers in which they have been tested, even if the mutation that they target is shared by several tumour types. Vemurafenib and dabrafenib, for example, target a mutation in a protein called BRAF. They have been approved to treat melanoma, but not lung or thyroid cancers that have the same mutation.

The problem is partly one of numbers, says Richard Schilsky, chief medical officer of the American Society of Clinical Oncology (ASCO) in Alexandria, Virginia. "There are not enough patients and not enough money to test every drug in every subtype of cancer using a randomized clinical trial," he says.

"It's going to be what we learn from our patients that leads us back to understanding the cancer biology."

To address this shortcoming, Schilsky is spearheading a programme called the TAPUR (Targeted Agent and Profiling Utilization Registry) Study, to be launched in mid-2015. The study, run through ASCO, will compile information about treatments, outcomes and mutations in people who have exhausted conventional therapies and moved on to unapproved treatments.

A similar effort, led by Dane Dickson, director of clinical science for molecular diagnostics at the health benefits provider Palmetto of Columbia, South Carolina, has brought together pharmaceutical companies, researchers and patient advocates to launch another registry that aims to capture data about off-label use. The programme, called MED-C (Molecular Evidence Development Consortium), will require every person who enrols to undergo a standardized genetic test so that researchers can better compare results from different hospitals.

Both programmes are in discussions with pharmaceutical companies to help to provide therapies free-of-cost to participants. This is intended to motivate physicians to participate. In exchange, the companies have an opportunity to gather more data about their drugs.

The benefit for patients is clear, says Ellen Sigal, chairwoman and founder of Friends of Cancer Research, an advocacy group based in Washington DC, which co-hosted the conference with the Brookings Institution, a nearby think-tank. "Off-label use is happening and we'd better figure out a way to get the data and do it in a meaningful way," she says. "Right now, we are getting nothing." ■

CORRECTION

The World View 'Open access is tiring out peer reviewers' (*Nature* **515,** 467; 2014), erroneously calculated the percentage rise in the number of articles indexed in Scopus as 213%. In fact, the increase is 113%.