When Joseph Paul Eder, MD, Director of Experimental Therapeutics and the Phase I Research Group, came to Yale in the summer of 2012, only a few Phase I clinical trials were underway. A more robust Phase I program was important to achieve Yale’s mission. Eighteen months later, 10 Phase I trials are open, and by the end of 2014 Dr. Eder expects that number to be somewhere between 15 and 18.

Among the most exciting trials now underway, he says, are five using “checkpoint inhibitor” immunotherapies that activate the immune system and shrink tumors. The targets are melanoma, kidney cancer, lung cancer, and others. These trials have built Yale Cancer Center’s reputation as an innovator in immune-based therapies. Three additional trials will soon open.

“These are complicated new treatments,” Dr. Eder said. “The pharmaceutical companies want to bring their trials to the people with experience and expertise with these novel agents and their unique effects, good and bad.”

He gives several reasons why it’s important that these early clinical trials of new cancer therapies have started coming to Yale: “We urgently need new and better treatments for our patients who have run out of other treatment options. Many of the therapies we use in cancer medicine are not good therapies – they are just the best we have. These agents and trials allow us to look for new causes for drug effectiveness or drug resistance. The trials bring in additional resources for the work that needs to be done by our scientists. They establish us as a place that can get additional funding to help basic scientists explore new areas – the NIH is more likely to send funds your way if you translate into some sort of clinical impact. So are pharmaceutical companies.”

Previously these companies did not often think of Yale as a place to conduct trials of their experimental drugs. Since her arrival at Yale in May, Juliane Juergensmeier, PhD, Research Scientist, Developmental and Experimental Therapeutics, has been in discussion with large and small pharmaceutical companies to explain that Yale Cancer Center can handle their trials, no matter how difficult or complicated.

“They can see that we are building an outstanding center of clinical and scientific excellence here, and are interested not just in accruing patients to their trials but in also progressing scientific understanding of the disease and treatment.” All companies have been receptive to Dr. Juergensmeier’s approach. Over the last six months, a number of them visited Yale for portfolio presentations and smaller detailed discussions with scientists.

Like Dr. Eder, Dr. Juergensmeier has many years of experience in both academia and industry, and understands the needs of both. “We know what Pharma needs,” Dr. Eder said. “We know how to put together a message that will resonate with all the different levels – not just the scientists but the people who control resources, who see that we can help them get to their next milestones of drug development.”

Phase I trials also may come to Yale Cancer Center from other avenues, such as the industry contacts of veteran Yale investigators. Dr. Eder spent much of his time in 2013 working to get Yale into the clinical trials network of the National Cancer Institute.

The fourth potential source of trials is scientific hypotheses developed at Yale and then brought into the clinic. That takes longer, explained Dr. Eder, “because you don’t have Pharma handing you a protocol and a budget.” But he expects such trials soon, possibly in the area of therapy utilizing nanoparticles. Drs. Eder and Juergensmeier work closely with Dr. Roy Herbst and Dr. Karen Anderson, the co-leaders of the Developmental Therapeutics Research Program and at Yale Cancer Center to bring new agents from the labs at Yale into the clinics.

Perhaps the group most pleased about the influx of Phase I trials are patients. Many of them come to Smilow Cancer Hospital at Yale-New Haven with advanced tumors. Existing therapies have failed them and they are looking for options. “That’s where clinical trials come into cancer medicine,” Dr. Eder said. “They offer the hope that patients and providers want.”