

been platform companies.” Plus, whereas many startups have only preclinical data, initial results from a clinical trial at Sloan-Kettering suggest that Juno’s T cell therapy works in humans. At the American Society of Hematology meeting in New Orleans last month, researchers reported that 15 out of 17 people with acute lymphoblastic leukemia responded favorably to the therapy.

Although not every company that looks for Series A money has human data, many of today’s biotech startups tend to have more advanced data than they used to. That’s been possible thanks in large part to an increasing focus on translational research at universities and their spinoffs. “All the stars are aligned,” says Kenneth Kaitin, director of the Tufts Center for the Study of Drug Development in Boston. “Academic institutions, small companies

and large companies are feeding into a new pharmaceutical landscape that is encouraging investment in early-stage research—and Juno is a recipient of that trend.”

Large initial investments might alleviate some of stress that comes with funding a budding biotech, but the numbers suggest that cash can’t buy success. A report in the November issue of the journal *START-UP* that looked at 163 biopharma Series A financings between 2002 and 2007 found no correlation between the early amounts raised and the value of the startups when they went public or were acquired by other companies. Edwards’s January 2013 analysis came to a similar conclusion.

According to Lerner, however, there might be a less obvious advantage to these large initial rounds: driving away competition. “If you’re

thinking about doing a competing startup and there’s a company that’s being formed in your area which gets a \$100 million initial financing round, you might be less willing to jump into that space,” he says.

Whether Juno’s large pool of cash will help the company beat its competitors remains to be seen. Carl June, of the University of Pennsylvania in Philadelphia, is also working on T cell immunotherapies to treat cancer. In 2012, Novartis, the Swiss drugmaker, acquired the rights to June’s therapy and pledged \$20 million to help build a research center to develop the therapy on his university’s campus. The race is on now for which group will be first to market. Either way, in the match between Juno and June, it’s patients with cancer who will win.

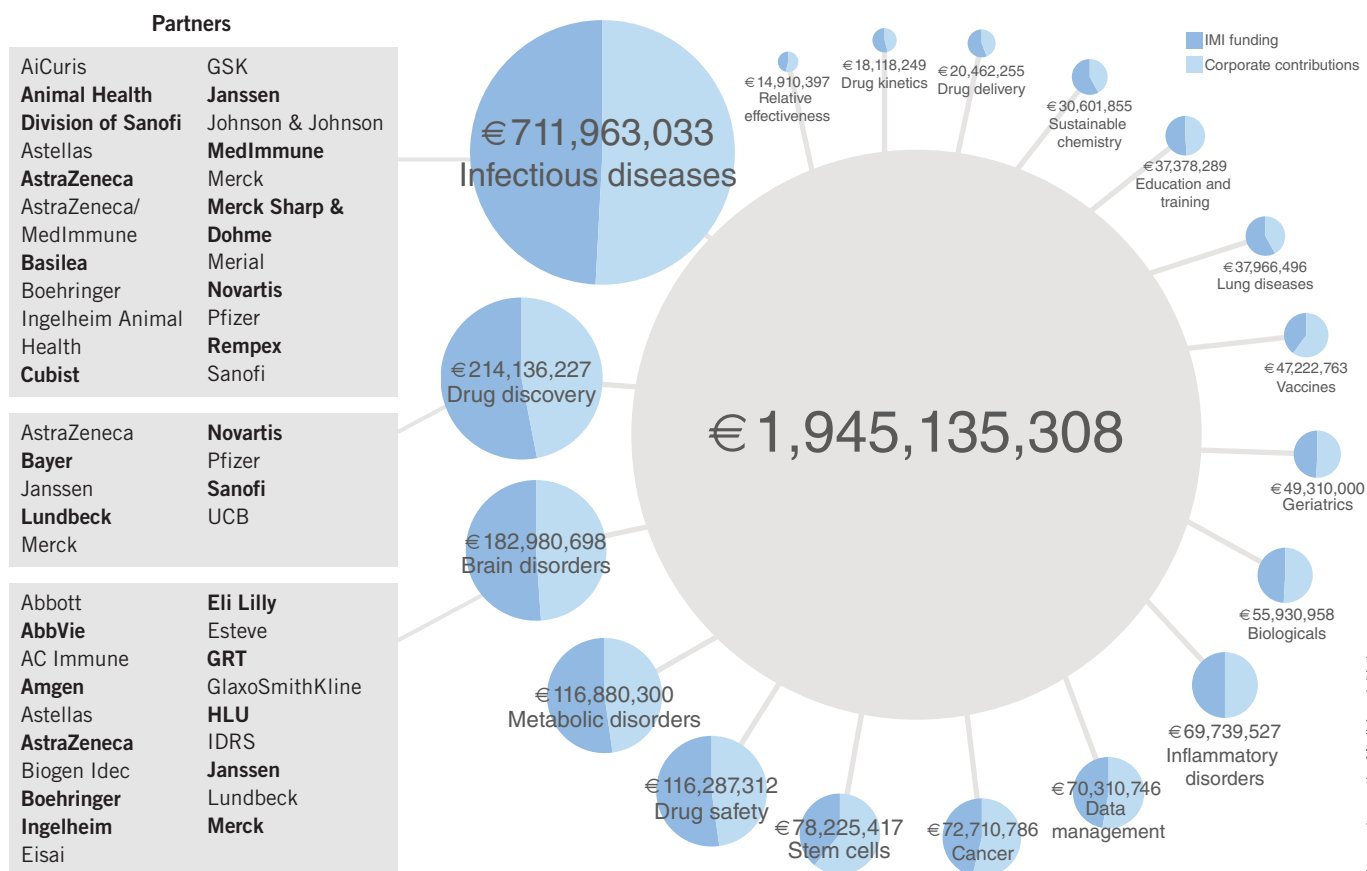
Cassandra Willyard

Infectious disease leads in first phase of Europe's IMI effort

The Innovative Medicines Initiative (IMI) launched in 2008 as part of a massive European push to foster public-private partnerships in biomedicine. Over its six years of existence, the €2 billion (\$2.7 billion) joint venture between the EU and the European Federation of Pharmaceutical Industries and Associations has collaborated with 43 companies and worked with scientists from 31 participating countries. Nine IMI-backed medicinal products have gone into a total of 90 clinical trials. Close to 600 peer-reviewed research papers have

come out of the effort.

Now, the IMI is coming to the end of its first phase. Last month, the Brussels-based institution announced its eleventh and final call for proposals within the initial budget allocation. The next phase of the initiative—what’s known as IMI 2—is hoped to launch this spring and last another ten years. Here, *Nature Medicine* takes a look at where the IMI’s money has been allocated to date and highlight the industry partners who have supplied funds in three areas.



Source: Innovative Medicines Initiative

