Pfizer Logo

MD Anderson teams up with Pfizer to advance cancer immunotherapy

Monday, January 06, 2014 - 08:00am

Alliance aims to accelerate and improve new treatments through MD Anderson's Moon Shots Program immunotherapy platform, led by trailblazing scientist Jim Allison, Ph.D.

HOUSTON –The University of Texas MD Anderson Cancer Center and Pfizer will collaborate in the development of immune-based approaches to cancer treatment, the first such agreement made through MD Anderson's Moon Shots Program immunotherapy platform.

"The pioneering work of platform leader Jim Allison on why tumors evade the immune system has provided patients with a new class of medicine that can activate the immune system to attack cancer and, in some patients, bring about cure. Cancer immunotherapy is the most exciting and promising advance in the cancer field today," MD Anderson President Ronald DePinho, M.D., said.

"Pfizer's strong experience in immunology and cancer therapeutics is an outstanding match for the talent and capabilities available through MD Anderson's immunotherapy platform," he continued. "This agreement also recognizes our substantial investment in resources, expertise and immunotherapy leadership in the past year under our Moon Shots Program."

MD Anderson's Moon Shots Program is an ambitious effort to dramatically reduce cancer deaths, starting with six moon shots that target eight cancers and are backed by several platforms – infrastructure, technology or expertise – that support research efforts.

The three-year agreement is designed to accelerate the progress of immune-based treatments to cancer patients and to more efficiently identify and exploit new combination therapies, as well as biomarkers to guide and monitor treatment.

"This collaboration offers a unique opportunity to work directly with recognized pioneers in the rapidly advancing field of cancer immunotherapy," said Jaume Pons, Ph.D., Chief Scientific Officer of Pfizer's Rinat biotech unit. "We look forward to partnering with the researchers and clinicians in the Moon Shots Program to potentially bring new treatment approaches to cancer patients."

"Pfizer's Rinat unit is a leader in antibody drug development and has a strong track record of scientific innovation, making it an excellent partner for our first alliance," said Allison, MD Anderson chair of Immunology and executive director of the immunotherapy platform.

In December, the journal Science designated cancer immunotherapy as its 2013 Breakthrough of the Year, noting Allison's leadership in the field, The Economist named Allison winner of its 2013 Innovations Award for Biosciences and he received a $3 million Breakthrough Prize in Life Sciences from the foundation of the same

name launched last year by internet and social media entrepreneurs.

The first of a few select agreements
MD Anderson's immunotherapy platform has enhanced and increased the institution's capabilities in expertise, technology and techniques since Allison's arrival in November of 2012.

Allison's basic research and subsequent drug development established immune checkpoint blockade, a new treatment that takes the brakes off of immune T cells, freeing them to combat cancer. The drug ipilimumab (Yervoy) became the first ever approved for late-stage melanoma, with more than 20 percent of patients achieving complete responses for five years and longer, unheard of results for the disease.

Patrick Hwu, M.D., chair of Melanoma Medical Oncology is co-director of the platform. Translational physician-scientist Padmanee Sharma M.D., Ph.D., associate professor of Genitourinary Medical Oncology, is scientific director.

Allison noted that MD Anderson has invited leading companies in the field to establish similar collaborations, which will be limited to a few agreements, negotiated through the office of Ferran Prat, Ph.D., J.D., vice president of strategic industry ventures.

"Our industry collaborators will benefit from our state-of-the-art facilities, access to MD Anderson's unique and large patient population for clinical trials through novel research protocols, and an opportunity to work with the best," Prat said.

"One example is the capacity for studies that provide one or two doses of an investigational drug to patients who consent before they have surgery to remove a tumor. This allows comprehensive analysis of both tumor and peripheral blood to assess the impact of the drug's activity, evaluate biomarkers, identify new ones and provide a solid basis for generating new hypotheses for combination therapies," Prat said.

MD Anderson has invested $40 million in the platform, including philanthropic funds and a $10 million Established Investigator grant from the Cancer Prevention and Research Institute of Texas to recruit Allison from Memorial Sloan-Kettering Cancer Center in New York.

A center of immunotherapy excellence
Since approval of ipilimumab in 2011, additional immune checkpoints and drugs to target them have been discovered and are advancing in clinical trials. At MD Anderson, clinical trials of ipilimumab and other agents target melanoma, lymphoma, lung, breast, gastric and prostate cancers, with more to come.

In addition, methods to vastly increase a patient's own cancer-targeting T cells in the lab or to customize their T cells via gene transfer to more efficiently attack tumors and then infusing them back into the patient are in clinical trials. Therapeutic vaccine development includes efforts for melanoma, lymphoma and breast cancer.

"The era of immune system therapies for cancer is really just beginning," Allison said. "MD Anderson is a center of immunotherapy excellence now that will grow, improve and significantly contribute to development of more effective drugs for cancer patients."

About MD Anderson
The University of Texas MD Anderson Cancer Center in Houston ranks as one of the world's most respected centers focused on cancer patient care, research, education and prevention. MD Anderson is one of only 41 comprehensive cancer centers designated by the National Cancer Institute. For 10 of the past 12 years, including 2013, MD Anderson has ranked No. 1 in cancer care in "Best Hospitals," a survey published annually in U.S.

News & World Report. MD Anderson receives a cancer center support grant from the National Cancer Institute of the National Institutes of Health (P30 CA016672).

Contact:
Scott Merville
713-792-0661; Cell: 713-516-4855
smerville@mdanderson.org