PEOPLE

UPMC Hillman Cancer Center

Robert L. Ferris, MD, PhD, a renowned expert in immunotherapy and a specialist in head and neck cancer, was named director of the University of Pittsburgh Medical Center's Hillman Cancer Center in Pennsylvania, effective July 1. He succeeds Nancy Davidson, MD, who departed last year. Ferris has worked at the Hillman Cancer Center for the past 15 years, serving as chief of the Division of Head and Neck Oncologic Surgery. He also served as co-leader of the Cancer Immunology Program and was most recently appointed associate director of translational research and co-director of the Tumor Microenvironment Center.

Mass General Cancer Center

Michael J. Birrer, MD, PhD, a medical oncologist and expert in the early detection and treatment of gynecologic cancers, became director of the University of Alabama at Birmingham Comprehensive Cancer Center on August 1. He succeeds Edward E. Partridge, MD, who retired after serving in that role for the past 10 years. Previously, Birrer was director of medical gynecologic oncology and director of the gynecologic cancer research program at the Massachusetts General Hospital Gillette Cancer Center, led the Dana-Farber/Harvard Cancer Center program in gynecologic cancers, and served as a professor of medicine at Harvard Medical School, all in Boston.

Also this month, **Ruben A. Mesa, MD,** will begin his new role as director of the UT Health San Antonio Cancer Center. (UT Health San Antonio is the new name of The University of Texas Health Science Center San Antonio.) He replaces Ian M. Thompson, MD, who retired in January. Prior to his move to Texas, Mesa served as chair of the Division of Hematology and Medical Oncology at the Mayo Clinic in Phoenix, Arizona, as well as deputy director of the cancer center there. He is an internationally recognized expert on myeloproliferative neoplasms.

Widespread Genomic Testing Deemed Feasible

Although comprehensive genomic screening has not yet become routine when treating patients with cancer, widespread testing in those with advanced, refractory disease is feasible, according to the ongoing ProfiLER study. The study also found that patients who subsequently received a treatment matched to the genetic changes in their tumor lived longer than those who lacked a so-called actionable mutation.

The findings were presented in early June at the 2017 American Society of Clinical Oncology Annual Meeting in Chicago, IL, by Olivier Trédan, MD, PhD, chair of the Department of Medical Oncology at the Centre Léon Bérard in Lyon, France, and the study's lead author.

Trédan's team enrolled 2,676 patients with a variety of cancer types between 2013 and May 2017. DNA extracted from 1,944 tumor samples was analyzed by next-generation sequencing of 69 cancer-related genes and whole-genome array comparative genomic hybridization. At least one actionable alteration, which could be treated with an existing targeted therapy, was found in 52% of patients. The most common actionable mutations were found in the PI3K/mTOR, cyclin, and multitarget tyrosine kinase pathways, and these actionable mutations were detected in many common cancers, including breast; central nervous system; colorectal; gynecologic; head and neck; liver, pancreas, and biliary tract; and lung, as well as sarcomas.

A molecular tumor board recommended a targeted treatment to 676 patients (35% of those tested) based on the availability of drugs that could attack the aberrant protein or pathway. However, just 143 patients (7% of those tested) received the recommended agent, usually as part of a clinical trial. Trédan noted that the other 533 patients did not receive the suggested targeted therapy due to rapid disease progression, not meeting the eligibility criteria for a clinical trial, or difficulties in obtaining the recommended drugs.

Researchers next compared the overall survival rates for patients who received molecularly targeted agents based on genomic testing with 502 patients who did not. After 3 years, 53.7% of patients who received the targeted therapy were alive, compared with 46.1% of those who did not. The 5-year survival rate was also higher—34.8% compared with 28.1%, respectively, Trédan reported.

The researchers "should be applauded for this huge endeavor," commented Bryan Schneider, MD, of the Indiana University Melvin and Bren Simon Cancer Center in Indianapolis and director of the Indiana University Health Precision Genomics Program.

However, Schneider cautioned that "even though the trends look pretty, the overall survival is not quite statistically significant." In addition, as with other datasets, he noted that "there is a substantial loss of patients between those who have an actionable mutation and those who get to drug."

Some trials have had greater success at matching patients to therapy based on their mutational profile. Compared with 7% in the ProfiLER trial, 19% of patients in the just-published MOSCATO 01 trial received targeted therapy (Cancer Discov 2017;7:586–95). In addition, across 10 datasets from several institutions, Schneider noted that as many as 25% of patients received a targeted therapy, with an average of 11%, as in Memorial Sloan Kettering Cancer Center's IMPACT (Nat Med 2017;23:703–13).

Regardless, "we've got to do a better job of getting [patients] to targeted drugs," Schneider continued. "This clearly mandates broad access to clinical trial options and maybe earlier testing. But importantly, we have to demonstrate where this works, and this will be best learned through our umbrella, basket, and randomized trials."

Sumanta Kumar Pal, MD, of City of Hope Comprehensive Cancer Center in Duarte, CA, said many patients aren't yet able to benefit from personalized