NCCN Collaborates with Bristol-Myers Squibb to Study PD-L1 Expression and Test Interpretation in Lung Cancer

NCCN is collaborating with Bristol-Myers Squibb to promote the advancement of scientific knowledge concerning programmed death-ligand 1 (PD-L1) protein expression and other immune markers in lung cancer.

FORT WASHINGTON, PA — New molecules and pathways with pivotal functions in regulating the immune system have been discovered recently, providing new understanding of how tumor cells avoid the immune system. One of these molecules, named programmed cell death (PD-1), and molecules that interact with PD-1 (PD-L1 and PD-L2), are found on many types of blood cells, tumor cell lines, and tumor tissues1,2,3,4. Studies have shown that these molecules, also known as immune checkpoints, exert important inhibitory functions in chronic inflammation, autoimmune diseases and tumors5. Currently, there is limited information on the prevalence and the prognostic role of PD-L1 expression in non-small cell lung cancer (NSCLC). In addition, with the advent of immuno-oncology research, the treatment landscape continues to evolve. As a result, there is a need for additional study of PD-L1 to determine the practical aspects of testing and provide important insights into the similarities and differences among the variety of tests used to determine PD-L1 expression.

To improve the scientific knowledge concerning PD-L1 protein expression and help pathologists understand the diagnostic nuances associated with lung cancer treatment, the National Comprehensive Cancer Network® (NCCN®) Oncology Research Program (ORP) and Bristol-Myers Squibb (BMS) are collaborating on the NCCN/BMS Thoracic Pathology Protocol Development Team. This team will be responsible for a study designed to:

1) understand how different assays measure PD-L1 protein expression,

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2) measure the concordance of pathologist interpretation of various test results, and
3) evaluate the heterogeneity of PD-L1 protein expression within tumor samples.

“There has been rapid innovation in the field of immuno-oncology and genomics, and NCCN is proud to collaborate with BMS at the forefront of research that has potential to provide advancement in the treatment of people with NSCLC, which is the leading cause of cancer death in the United States today,” said Robert C. Young, MD, Interim Vice President, ORP, NCCN.

The study protocol, designed by a team of thoracic pathologists from nine NCCN Member Institutions and BMS scientists, is titled, “A Multi-Institutional Analysis of Programmed Cell Death-Ligand 1 (PD-L1) Expression in Lung Cancer.” The NCCN experts will serve as investigators for the research, which is expected to begin this month.

“We are pleased to collaborate with NCCN on this new study, and appreciate the organization’s interest in conducting important research on PD-L1 testing that may help inform real-world clinical practice,” said Laura Bessen, Vice President, Head of U.S. Medical, Bristol-Myers Squibb. “As a company at the forefront of innovative immuno-oncology research, we are committed to bringing together experts in the field who can help provide guidance on the future of PD-L1 testing including the different assays available, and pave the way toward continued clarity for the scientific community.”

The multi-institutional non-clinical study is co-chaired by Ignacio Wistuba, MD, The University of Texas MD Anderson Cancer Center, and David Rimm, MD, PhD, Yale Cancer Center/Smilow Cancer Hospital at Yale-New Haven. NCCN will oversee all phases of the study.

The NCCN ORP draws on the expertise of investigators at NCCN Member Institutions and the NCCN Affiliate Research Consortium (ARC) to facilitate all phases of research. This research is made possible by collaborations with pharmaceutical and biotechnology companies in order to advance therapeutic options for patients with cancer.

For more information about the NCCN ORP, visit NCCN.org/ORP.

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About the National Comprehensive Cancer Network

The National Comprehensive Cancer Network® (NCCN®), a not-for-profit alliance of 26 of the world’s leading cancer centers devoted to patient care, research, and education, is dedicated to improving the quality, effectiveness, and efficiency of cancer care so that patients can live better
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lives. Through the leadership and expertise of clinical professionals at NCCN Member Institutions, NCCN develops resources that present valuable information to the numerous stakeholders in the health care delivery system. As the arbiter of high-quality cancer care, NCCN promotes the importance of continuous quality improvement and recognizes the significance of creating clinical practice guidelines appropriate for use by patients, clinicians, and other health care decision-makers.

The NCCN Member Institutions are: Fred & Pamela Buffett Cancer Center, Omaha, NE; Case Comprehensive Cancer Center/University Hospitals Seidman Cancer Center and Cleveland Clinic Taussig Cancer Institute, Cleveland, OH; City of Hope Comprehensive Cancer Center, Los Angeles, CA; Dana-Farber/Brigham and Women’s Cancer Center | Massachusetts General Hospital Cancer Center, Boston, MA; Duke Cancer Institute, Durham, NC; Fox Chase Cancer Center, Philadelphia, PA; Huntsman Cancer Institute at the University of Utah, Salt Lake City, UT; Fred Hutchinson Cancer Research Center/Seattle Cancer Care Alliance, Seattle, WA; The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore, MD; Robert H. Lurie Comprehensive Cancer Center of Northwestern University, Chicago, IL; Mayo Clinic Cancer Center, Phoenix/Scottsdale, AZ, Jacksonville, FL, and Rochester, MN; Memorial Sloan Kettering Cancer Center, New York, NY; Moffitt Cancer Center, Tampa, FL; The Ohio State University Comprehensive Cancer Center | James Cancer Hospital and Solove Research Institute, Columbus, OH; Roswell Park Cancer Institute, Buffalo, NY; Siteman Cancer Center at Barnes-Jewish Hospital and Washington University School of Medicine, St. Louis, MO; St. Jude Children’s Research Hospital/The University of Tennessee Health Science Center, Memphis, TN; Stanford Cancer Institute, Stanford, CA; University of Alabama at Birmingham Comprehensive Cancer Center, Birmingham, AL; UC San Diego Moores Cancer Center, La Jolla, CA; UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, CA; University of Colorado Cancer Center, Aurora, CO; University of Michigan Comprehensive Cancer Center, Ann Arbor, MI; The University of Texas MD Anderson Cancer Center, Houston, TX; Vanderbilt-Ingram Cancer Center, Nashville, TN; and Yale Cancer Center/Smilow Cancer Hospital, New Haven, CT.

Clinicians, visit NCCN.org. Patients and caregivers, visit NCCN.org/patients.

About Bristol-Myers Squibb

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