Early Findings Exploring the Relationship of PD-L1 Expression and Clinical Outcomes with MK-3475, Merck’s Investigational Anti-PD-1 Immunotherapy, Presented at AACR Annual Meeting 2014

Release Date:
Sunday, April 6, 2014 10:30 am EDT

Terms:
Oncology  Oncology Newsroom  Research and Development News  Corporate News  Latest News

Dateline City:
WHITEHOUSE STATION, N.J.

Exploratory Analyses in Advanced Melanoma and NSCLC Presented in Oral Session

Dr. Roger Perlmutter to Present at AACR Opening Plenary Session

WHITEHOUSE STATION, N.J.--(BUSINESS WIRE)--Merck (NYSE: MRK), known as MSD outside the United States and Canada, today announced the presentation of early findings from studies exploring the relationship between tumor PD-L1 expression and clinical outcomes following monotherapy treatment with MK-3475, an investigational anti-PD-1 immunotherapy, in patients with advanced melanoma and advanced non-small cell lung cancer (NSCLC). Responses were observed in patients with PD-L1 negative tumors; although the preliminary findings for both tumor types suggest that higher PD-L1 expression was associated with higher overall response rates. Further study of the relationship between PD-L1 expression and responses to MK-3475 as monotherapy and in combination with other treatments for melanoma, NSCLC and other tumors is ongoing or planned.

These findings will be presented today in an oral session at the AACR Annual Meeting 2014 in San Diego and were highlighted within the official AACR press program. Separately, as part of today’s opening plenary session, Dr. Roger M. Perlmutter, president, Merck Research Laboratories, will deliver a plenary lecture entitled “Tumor-Specific Immune Activation: Immuno-Oncology Comes of Age”.

“These exploratory analyses are providing us with insightful information regarding the association of PD-L1 expression and clinical outcomes with MK-3475,” said Dr. Eric Rubin, vice president, Oncology, Merck Research Laboratories. “In both types of advanced cancers studied, we are seeing durable responses in a wide range of patients, including those with PD-L1 negative tumors. We will continue to explore PD-L1 expression and other selection markers across tumors in our MK-3475 development program.”

Preliminary PD-L1 Expression Analysis in Advanced Melanoma

Preliminary findings on PD-L1 expression in 125 evaluable advanced melanoma patients, based on a minimum of 6-month follow-up from the ongoing Phase 1B KEYNOTE-001 study, were presented by Dr. Adil Daud, co-director of the University of California, San Francisco (UCSF) Melanoma Center, and director of melanoma clinical research at the UCSF Helen Diller Family Comprehensive Cancer Center, (abstract #5013). Results from the preliminary analysis showed that 71 percent (n=89) of advanced melanoma patients had positive PD-L1 tumors at the optimally defined cut-point of ≥1 percent of tumor cells stained, as measured by immunohistochemistry (IHC). An additional cut-point of ≥10 percent of cells stained by IHC measurement was also evaluated.

In the overall evaluable advanced melanoma population, the overall response rate was 40 percent (n=113) as measured by RECIST 1.1 (Response Evaluation Criteria in Solid Tumors). Based on the ≥1 percent cut-point, responses were observed in 49 percent [95% CI; range 38-61] (n=83) (per RECIST criteria) of patients with positive PD-L1 tumors and 13 percent [95% CI; range 4-31] (n=30) of patients with PD-L1 negative tumors. When the ≥10 percent cut-point was used, responses were observed in 52 percent [95% CI; range 40-65] (n=65) of patients with PD-L1 positive tumors and 23 percent [95% CI; range 12-37] (n=48) of patients with PD-L1 negative tumors.

The high prevalence of PD-L1 expression, along with the responses observed in the overall population and patients with PD-L1 positive tumors based on the ≥1 percent cut-point, suggest that selecting patients for MK-3475 therapy based on measurement of PD-L1 is of limited utility in this tumor. Preliminary findings for overall disease control rates, median estimated progression-free survival (PFS), and median estimated overall survival (OS) were also presented.
Preliminary PD-L1 Expression Analysis in Advanced NSCLC

Preliminary findings on PD-L1 expression in 129 evaluable previously-treated patients with advanced NSCLC, based on a minimum of 19-week follow-up from the ongoing KEYNOTE-001 study, were presented by Dr. Leena Gandhi, assistant professor of medicine at Harvard Medical School and thoracic oncologist at Dana-Farber Cancer Institute (abstract #5014). Results from the preliminary analysis showed that approximately 45 percent of advanced NSCLC patients had positive PD-L1 tumors at a cut-point of ≥1 percent of tumor cells stained as defined by IHC assessment. Based on this data set, the preliminary analysis suggests that the optimal cut-point is ≥50 percent of tumor cells stained by IHC assessment. When using this measurement, approximately 25 percent of advanced NSCLC patients had tumors that strongly expressed PD-L1.

In the overall evaluable advanced NSCLC population, the overall response rate was 19 percent (n=129) (per RECIST criteria). In evaluable PD-L1-positive strong expresser population, responses were seen in 37 percent [95% CI: range 22-53] (n=15/41) (per RECIST criteria) of these patients, with responses also observed in 11 percent [95% CI: range 6-20] (n=10/88) of patients with PD-L1 low or negative tumors. When the ≥1 percent cut-point was used, responses were observed in 25 percent [95% CI: range 17-36] (n=22/87) of evaluable patients with PD-L1 positive tumors and 7 percent [95% CI: range 2-20] (n=3/42) of patients with PD-L1 negative tumors. Preliminary data on estimated median PFS and estimated median OS were also presented.

No adverse events were presented as part of these exploratory analyses and were consistent with those previously reported for MK-3475.

Additional Merck Oncology Data Presentations at AACR 2014

Additional Merck research presented at AACR include the following abstracts (presented as posters on Wednesday, April 9):

- mDX400, the murine analog against MK-3475 is active in immunocompetent, autochthonous murine models of melanoma and breast cancer (Abstract #5024)
- Dissecting the dynamics of anti-PD1 immunotherapy in preclinical tumor models (Abstract #5025)

About MK-3475

Many tumors are able to evade the immune system through a mechanism that exploits the PD-1 inhibitory checkpoint protein. MK-3475 is an investigational, highly selective anti-PD-1 immunotherapy designed to restore the ability of the immune system to recognize and target cancer cells by selectively achieving dual ligand blockade (PD-L1 and PD-L2) of the PD-1 protein. By blocking PD-1, MK-3475 enables activation of the immune system’s T-cells that target cancer, essentially by releasing a brake on the immune system.

MK-3475 is being studied in 15 clinical trials estimated to enroll more than 4,000 patients across more than 30 types of cancer. Additional trials, both as monotherapy and in combination with other cancer therapeutics, are planned. For information on ongoing MK-3475 clinical trials please visit http://www.merck.com/clinical-trials.

Merck announced Breakthrough Therapy designation for MK-3475 in advanced melanoma by the U.S. Food and Drug Administration in April 2013. Merck announced in January the initiation of a rolling submission of a Biologics License Application for MK-3475 in advanced melanoma in the U.S. The company expects to complete the submission in the first half of 2014.

About Advanced Melanoma

There were an estimated 232,000 new cases of melanoma diagnosed in 2012 worldwide. Melanoma is the most dangerous type of skin cancer and is the leading cause of death from skin disease. While it accounts for only five percent of all cases, melanoma is the cause of the vast majority of skin cancer deaths. According to the American Cancer Society, an estimated 9,480 people in the U.S. died from advanced melanoma in 2013.

About Lung Cancer

Lung cancer is the leading cause of cancer death worldwide in both men and women, with an estimated 1.5 million deaths worldwide each year, according to the American Cancer Society. NSCLC is the most common type of lung cancer representing about 85 percent of all lung cancer diagnoses.

About Merck

Today’s Merck is a global healthcare leader working to help the world be well. Merck is known as MSD outside the United States and Canada. Through our prescription medicines, vaccines, biologic therapies, and consumer care and animal health products, we work with customers and operate in more than 140 countries to deliver innovative health solutions. We also demonstrate our commitment to increasing access to healthcare through far-reaching policies, programs and partnerships. For more information, visit www.merck.com and connect with us on Twitter, Facebook and YouTube.

Merck Forward-Looking Statement

This news release includes “forward-looking statements” within the meaning of the safe harbor provisions of the United States Private Securities Litigation Reform Act of 1995. These statements are based upon the current beliefs and expectations of Merck’s management and are subject to significant risks and uncertainties. There can be no guarantees with respect to pipeline products that the products will receive the necessary regulatory approvals or that they will prove to be commercially successful. If underlying assumptions prove inaccurate or risks or uncertainties materialize, actual results may differ materially from those set forth in the forward-looking statements.

Risks and uncertainties include, but are not limited to, general industry conditions and competition; general economic factors, including interest rate and currency exchange rate fluctuations; the impact of pharmaceutical industry regulation and healthcare legislation in the United States and internationally; global trends toward healthcare cost containment; technological advances, new products and patents attained by competitors; challenges inherent in new product
development, including obtaining regulatory approval; Merck’s ability to accurately predict future market conditions; manufacturing difficulties or delays; financial instability of international economies and sovereign risk; dependence on the effectiveness of Merck’s patents and other protections for innovative products; and the exposure to litigation, including patent litigation, and/or regulatory actions.

Merck undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise. Additional factors that could cause results to differ materially from those described in the forward-looking statements can be found in Merck’s 2013 Annual Report on Form 10-K and the company’s other filings with the Securities and Exchange Commission (SEC) available at the SEC’s Internet site (www.sec.gov).

Language:
English

Contact:
Media:
Ian McConnell, 973-901-5722
Claire Mulhearn, 908-423-7425
or
Investors:
Carol Ferguson, 908-423-4465
Justin Holko, 908-423-5088

Ticker Slug:
Ticker: MRK
Exchange: NYSE

Source URL: https://www.mrknewsroom.com/news-release/oncology-newsroom/early-findings-exploring-relationship-pd-l1-expression-and-clinical-o