

**Opdivo (nivolumab) Demonstrates High Overall Response Rate of 87%  
for Treatment of Relapsed or Refractory Hodgkin Lymphoma**

(PRINCETON, NJ, December 6, 2014) – Bristol-Myers Squibb Company (NYSE: BMY) announced positive results from a cohort of patients in its ongoing Phase 1b trial (CheckMate -039) which evaluated PD-1 immune checkpoint inhibitor, Opdivo (nivolumab), in patients with relapsed or refractory hematological malignancies (n=23).

Opdivo is a human anti-human PD-1 monoclonal antibody generated under a research collaboration entered into in May 2005 between ONO PHARMACEUTICAL CO.,LTD. (“ONO”) and the US-based company Medarex, Inc. When Medarex, Inc. was acquired by BMS in 2009, it also granted BMS its rights to develop and commercialize the human anti-human PD-1 monoclonal antibody in North America. Through the collaboration agreement entered into in September 2011 between ONO and BMS, ONO granted BMS exclusive rights to develop and commercialize Opdivo in the rest of the world, except in Japan, Korea and Taiwan where ONO had retained all rights to develop and commercialize the compound. On July 23, 2014, ONO and BMS signed a new collaboration agreement in which the companies agreed to jointly develop and commercialize Opdivo, ipilimumab and three early-stage immunotherapies in Japan, South Korea and Taiwan.

Late in September, FDA accepted for priority review the Biologics License Application for previously treated advanced melanoma based on data from first Phase 3 randomized trial of Opdivo. Agency granted second breakthrough therapy designation for Opdivo. European Medicines Agency validated the Marketing Authorization Application for advanced melanoma. Accelerated assessment has also been granted for this application. Also EMA validated for review the Marketing Authorization Application (MAA) for Opdivo in Non-Small Cell Lung Cancer (NSCLC).

Furthermore, BMS has a robust clinical development program in a variety of tumor types overseas, including: NSCLC, Renal Cell Carcinoma (RCC), Melanoma, Head and Neck Cancer, Blood Cancer, Glioblastoma, Colorectal Cancer, Pancreatic Cancer, Gastric Cancer, Hepatocellular Carcinoma, Triple-Negative Breast Cancer, Small-Cell Lung Cancer, Bladder Cancer. In Japan, ONO has launched it for melanoma treatment in September 2014. Also, ONO is conducting clinical development programs including RCC, NSCLC, Head and Neck Cancer, Gastric Cancer and Esophageal Cancer.

Attached from the following page is the press release made by BMS for your information.

Contact

ONO PHARMACEUTICAL CO., LTD.

Corporate Communications

[public\\_relations@ono.co.jp](mailto:public_relations@ono.co.jp)



## ***Opdivo* (nivolumab) Demonstrates High Overall Response Rate of 87% for Treatment of Relapsed or Refractory Hodgkin Lymphoma**

- *Results support Opdivo Breakthrough Therapy Designation granted by FDA for the treatment of patients with Hodgkin Lymphoma after failure of autologous stem cell transplant and brentuximab*
- *Safety and tolerability results, a primary objective in the study, were consistent with other Opdivo trials*
- *Results from another arm of this Phase 1 study show promising activity with Opdivo in non-Hodgkin Lymphoma*

(PRINCETON, NJ, December 6, 2014) – [Bristol-Myers Squibb Company](#) (NYSE: BMY) today announced positive results from a cohort of patients in its ongoing Phase 1b trial (CheckMate -039) which evaluated PD-1 immune checkpoint inhibitor, *Opdivo* (nivolumab), in patients with relapsed or refractory hematological malignancies (n=23). Results showed high levels of response in patients with relapsed or refractory classical Hodgkin Lymphoma (HL), with an overall response rate of 87% (n=20) and stable disease in 13% (n=3). These findings were published today in *The New England Journal of Medicine (NEJM)* and highlighted in the press briefing on Saturday, December 6 during the 56<sup>th</sup> annual meeting of the American Society for Hematology (Abstract #289).

In patients with HL, initial treatment typically consists of chemotherapy and/or radiation therapy, followed by an autologous stem cell transplant (ASCT) if the disease recurs. For those who relapse within one year after receiving a standard of care like ASCT, the median survival is only 1.3 years after progression.

“Despite the current treatment landscape, this patient population is still experiencing relatively short-lived responses that often result in relapse. So, there is a critical need to identify new options that can improve outcomes during the course of their care,” said Philippe Armand, M.D., Ph.D, medical oncologist, Dana-Farber Cancer Institute and Associate Professor, Department of Medicine, Harvard Medical School. “These findings with *Opdivo* are incredibly encouraging because they show that an immuno-oncology approach with a check point blockade has the potential to be applied to lymphomas.”

CheckMate -039 results support the first Breakthrough Therapy Designation for *Opdivo*, granted in May 2014 by the U.S. Food and Drug Administration (FDA) for the treatment of patients with HL after failure of autologous stem cell transplant and brentuximab.

“Bristol-Myers Squibb has a long standing commitment to the treatment of hematologic cancers, and we continue to advance potential treatment options for this patient population through our leadership in Immuno-Oncology,” said Michael Giordano, senior vice president, Head of Development, Oncology, Bristol-Myers Squibb. “These new data from *Opdivo* represent the next step towards our goal of identifying therapies that can transform the standard of care across a variety of cancer types.”

On Monday, December 8 additional results from CheckMate -039 will be highlighted in a separate oral presentation (Abstract #291) that could support the potential of *Opdivo* to treat patients with relapsed or refractory non-Hodgkin lymphoma. This ongoing Phase 1 trial is also exploring the combination of *Opdivo* and *Yervoy* in hematologic malignancies. Data from that arm of the study will be published at a later date.

Bristol-Myers Squibb has proposed the name *Opdivo* (pronounced op-dee-voh), which, if approved by health authorities, will serve as the trademark for nivolumab.

### **About CheckMate -039**

CheckMate -039 is an ongoing Phase 1 dose escalation study of patients with relapsed and refractory hematological malignancies, which includes a cohort evaluating *Opdivo* in patients with HL after failure of autologous stem cell transplant and brentuximab. The cohort includes 23 patients who were treated with *Opdivo* 3 mg/kg at week one, week four and every two weeks until disease progression or complete response or for a maximum of two years. The primary endpoints included evaluating the safety and tolerability of *Opdivo*. Secondary endpoints included determining antitumor activity, characterizing nivolumab pharmacokinetics and immunogenicity, and assessing PDL-1 and PD-L2 expression as a predictive biomarker.

In the trial, 87% (n=20) achieved an overall response, with 17% (n=4) achieving complete response and 70% (n=16) a partial response. The remaining patients – 13% (n=3) – experienced stable disease. Of the patients who achieved a complete and partial response, 60% (n=12) had their first response within eight weeks (range: 3-39 weeks). Data from the study also showed a progression-free survival rate of 86% at 24 weeks, meaning patients lived six months longer without their disease worsening.

Safety results were reported in all patients treated in the study. Overall, drug-related adverse events of any grade were reported in 78% of patients (n=18), with the most common being rash (22%) and decreased platelet count (17%). Of these, Grade 3 adverse events occurred in 22% of patients (n=5). There were no treatment-related Grade 4 or 5 adverse events.

## **About Opdivo**

Cancer cells may exploit “regulatory” pathways, such as checkpoint pathways, to hide from the immune system and shield the tumor from immune attack. *Opdivo* is an investigational, fully-human PD-1 immune checkpoint inhibitor that binds to the checkpoint receptor PD-1 (programmed death-1) expressed on activated T-cells.

Bristol-Myers Squibb has a broad, global development program to study *Opdivo* in multiple tumor types consisting of more than 50 trials – as monotherapy or in combination with other therapies – in which more than 7,000 patients have been enrolled worldwide. Among these are several potentially registrational trials in non-small cell lung cancer (NSCLC), melanoma, renal cell carcinoma (RCC), head and neck cancer, glioblastoma and non-Hodgkin lymphoma.

In 2012, the FDA granted Fast Track designation for *Opdivo* in NSCLC, melanoma and RCC. In April 2014, the company initiated a rolling submission with the FDA for *Opdivo* in third-line pre-treated squamous cell NSCLC and expects to complete the submission by year-end. The FDA granted *Opdivo* Breakthrough Therapy Designation in May 2014 for the treatment of patients with Hodgkin lymphoma after failure of autologous stem cell transplant and brentuximab. On July 4, Ono Pharmaceutical Co. announced that *Opdivo* received manufacturing and marketing approval in Japan for the treatment of patients with unresectable melanoma, making *Opdivo* the first PD-1 immune checkpoint inhibitor to receive regulatory approval anywhere in the world. On September 26, Bristol-Myers Squibb announced that the FDA accepted for priority review the Biologics License Application for previously treated advanced melanoma, and the Prescription Drug User Fee Act goal date for a decision is March 30, 2015. The FDA also granted *Opdivo* Breakthrough Therapy status for this indication. In the European Union, the European Medicines Agency (EMA) has validated for review the Marketing Authorization Application for *Opdivo* in advanced melanoma. The application has also been granted accelerated assessment by the EMA’s CHMP. The EMA also validated for review the MAA for nivolumab in NSCLC.

## **About Hodgkin Lymphoma**

Hodgkin lymphoma (HL), also known as Hodgkin disease, is a cancer of the lymphatic system, which originates in the white blood cells. HL is one of two main types of lymphomas. The five-year survival rate for advanced HL is approximately 65 percent in the U.S.<sup>i</sup> The median age of diagnosis is 39 in the U.S.<sup>ii</sup> This year, more than 9,100 new cases are estimated to be diagnosed with more than 1,100 deaths expected.<sup>iii</sup>

## **Immuno-Oncology at Bristol-Myers Squibb**

Surgery, radiation, cytotoxic or targeted therapies have represented the mainstay of cancer treatment over the last several decades, but long-term survival and a positive quality of life have remained elusive for many patients with advanced disease.

To address this unmet medical need, Bristol-Myers Squibb is leading advances in the innovative field of immuno-oncology, which involves agents whose primary mechanism is to work directly with the body's immune system to fight cancer. The company is exploring a variety of compounds and immunotherapeutic approaches for patients with different types of cancer, including researching the potential of combining immuno-oncology agents that target different and complementary pathways in the treatment of cancer.

Bristol-Myers Squibb is committed to advancing the science of immuno-oncology, with the goal of changing survival expectations and the way patients live with cancer.

## **About the Bristol-Myers Squibb and Ono Pharmaceutical Collaboration**

In 2011, through a collaboration agreement with Ono Pharmaceutical, Bristol-Myers Squibb expanded its territorial rights to develop and commercialize *Opdivo* globally except in Japan, South Korea and Taiwan, where Ono had retained all rights to the compound at the time. On July 23, 2014, Bristol-Myers Squibb and Ono Pharmaceutical further expanded the companies' strategic collaboration agreement to jointly develop and commercialize multiple immunotherapies – as single agents and combination regimens – for patients with cancer in Japan, South Korea and Taiwan.

## **About Bristol-Myers Squibb**

Bristol-Myers Squibb is a global pharmaceutical company whose mission is to discover, develop and deliver innovative medicines that help patients prevail over serious diseases. For more information about Bristol-Myers Squibb, visit [www.bms.com](http://www.bms.com), or follow us on Twitter at <http://twitter.com/bmsnews>.

## **Bristol-Myers Squibb Forward-Looking Statement**

*This press release contains "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995 regarding the research, development and commercialization of pharmaceutical products. Such forward-looking statements are based on current expectations and involve inherent risks and uncertainties, including factors that could delay, divert or change any of them, and could cause actual outcomes and results to differ materially from current expectations. No*

*forward-looking statement can be guaranteed. Among other risks, there can be no guarantee that Opdivo will receive regulatory approval in the U.S. or, if approved, that it will become a commercially successful product. Forward-looking statements in this press release should be evaluated together with the many uncertainties that affect Bristol-Myers Squibb's business, particularly those identified in the cautionary factors discussion in Bristol-Myers Squibb's Annual Report on Form 10-K for the year ended December 31, 2013 in our Quarterly Reports on Form 10-Q and our Current Reports on Form 8-K. Bristol-Myers Squibb undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise.*

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**Contacts:**

**Media:** Carrie Fernandez, 609.419.5448, [carrie.fernandez@bms.com](mailto:carrie.fernandez@bms.com)

**Investors:** Ranya Dajani, 609-252-5330, [ranya.dajani@bms.com](mailto:ranya.dajani@bms.com); Ryan Asay, 609-252-5020, [ryan.asay@bms.com](mailto:ryan.asay@bms.com)

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<sup>i</sup> American Cancer Society Website. "Survival rates for Hodgkin disease by stage." Available at: <http://www.cancer.org/cancer/hodgkindisease/detailedguide/hodgkin-disease-survival-rates>  
Accessed on December 8, 2014.

<sup>ii</sup> National Cancer Institute Surveillance, Epidemiology, and End Results Program Website. "SEER Stat Fact Sheets: Hodgkin Lymphoma." Available at: <http://seer.cancer.gov/statfacts/html/hodg.html>  
Accessed on December 8, 2014

<sup>iii</sup> American Cancer Society Website. "What are the key statistics about Hodgkin disease?" Available at: <http://www.cancer.org/cancer/hodgkindisease/detailedguide/hodgkin-disease-key-statistics>  
Accessed on December 8, 2014.