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Darzalex®▼ (daratumumab) Phase 3 Study Shows Efficacy and Safety Data of Anti-CD38 Monoclonal Antibody in Patients with Newly Diagnosed Multiple Myeloma

Phase 3 MAIA study results show daratumumab in combination with lenalidomide and dexamethasone reduced the risk of disease progression or death in newly diagnosed patients who are transplant ineligible

Data featured as a Late-Breaking Abstract at ASH 2018 (Abstract #LBA-2)

BEERSE, BELGIUM, December 4, 2018 – The Janssen Pharmaceutical Companies of Johnson & Johnson today announced results from the Phase 3 MAIA study demonstrating that the addition of daratumumab to lenalidomide and dexamethasone (Rd) significantly reduced the risk of disease progression or death in patients with newly diagnosed multiple myeloma who are ineligible for autologous stem cell transplant (ASCT) (Abstract #LBA-2).[1] These data were featured during the late-breaking abstract (LBA) oral session at the 60th American Society of Hematology (ASH) Annual Meeting in San Diego, CA.

"The Phase 3 MAIA study reinforces the clinical profile of daratumumab in combination with a standard of care treatment regimen for newly diagnosed patients with multiple myeloma who are

transplant ineligible," said Thierry Facon, M.D., Service des Maladies du Sang, Hôpital Claude Huriez, Lille, France, and principal investigator. "The positive data show the potential role of daratumumab in combination with lenalidomide and dexamethasone as an important new therapeutic approach for this patient population."

At a median follow-up of 28 months, data from the Phase 3 MAIA study showed daratumumab in combination with Rd significantly reduced the risk of disease progression or death by 44 percent in patients with newly diagnosed multiple myeloma who are transplant ineligible compared to treatment with Rd alone (Hazard Ratio [HR] = 0.56; 95 percent confidence interval [CI]: 0.43-0.73; p<0.0001).[1] The median progression-free survival (PFS) for daratumumab-Rd has not yet been reached, compared to 31.9 months for patients who received Rd alone.[1] The addition of daratumumab resulted in deeper responses compared to Rd alone, including increased rates of complete response (CR) or better (48 percent vs. 25 percent) and improved rates of very good partial response (VGPR) or better (79 percent vs. 53 percent).[1] Daratumumab-Rd induced a >3-fold higher rate of minimal residual disease (MRD) negativity compared to those who received Rd alone (24 percent vs. 7 percent).[1]

"These data underscore the consistent clinical profile observed among newly diagnosed patients with multiple myeloma receiving daratumumab therapy, including for those who are transplant ineligible," said Dr Catherine Taylor, Haematology Therapy Area Lead, Europe, Middle East and Africa (EMEA), Janssen-Cilag Limited. "This is the third study in newly diagnosed patients that has met its primary endpoint and we hope to continue delivering innovative advances to patients with multiple myeloma through our robust clinical research programme, which has the potential to revolutionise cancer treatment by arresting the disease at its earliest stages."

The most common Grade 3/4 treatment-emergent adverse events (TEAEs) for daratumumab-Rd (≥10 percent) included neutropenia (50 percent), lymphopenia (15 percent), pneumonia (14 percent) and anaemia (12 percent).[1] Infusion-related reactions (IRRs) occurred in 41 percent of patients, only 3 percent of which were Grade 3/4.[1] Incidence of invasive second primary malignancy was 3 percent in the daratumumab-Rd arm compared to 4 percent with Rd alone.[1] TEAEs with an outcome of death were 7 percent in the daratumumab-Rd arm compared to 6 percent in the Rd arm.[1] The safety profile of daratumumab was consistent with that of previous studies.[1]

These data will support a future application for marketing authorisation for daratumumab in combination with Rd for this patient population.

#ENDS#

About the MAIA Trial[1]

The randomised, open-label, multicentre Phase 3 study included 737 newly diagnosed patients with multiple myeloma ineligible for high-dose chemotherapy and ASCT aged 45-90 years old (median age of 73). Patients were randomised to receive either daratumumab-Rd or Rd alone in 28-day Cycles. In the daratumumab-Rd treatment arm, patients received daratumumab 16 milligrams per kilogram (mg/kg) IV weekly for Cycles 1 – 2, every two weeks for Cycles 3 – 6 and every 4 weeks for Cycle 7 and thereafter. Patients in the daratumumab-Rd and Rd treatment arm received 25 mg of lenalidomide on Days 1 – 21 of each 28-day Cycle, and dexamethasone at 40 mg once a week for each Cycle. Patients in both treatment arms continued until disease progression or unacceptable toxicity.

About daratumumab

Daratumumab is a first-in-class biologic targeting CD38, a surface protein that is highly expressed across multiple myeloma cells, regardless of disease stage.[2] Daratumumab is believed to induce tumour cell death through multiple immune-mediated mechanisms of action, including complement-dependent cytotoxicity (CDC), antibody-dependent cell-mediated cytotoxicity (ADCC) and antibody-dependent cellular phagocytosis (ADCP), as well as through apoptosis, in which a series of molecular steps in a cell lead to its death.[3] A subset of myeloid derived suppressor cells (CD38+ MDSCs), CD38+ regulatory T cells (Tregs) and CD38+ B cells (Bregs) were decreased by daratumumab.[3] Daratumumab is being evaluated in a comprehensive clinical development programme across a range of treatment settings in multiple myeloma, such as in frontline and relapsed settings.[4,5,6,7,8,9,10,11] Additional studies are ongoing or planned to assess its potential in other malignant and pre-malignant haematologic diseases in which CD38 is expressed, such as smouldering myeloma.[12,13] For more information, please see www.clinicaltrials.gov.

In Europe, daratumumab is indicated for use in combination with bortezomib, melphalan and prednisone for the treatment of adult patients with newly diagnosed multiple myeloma who are ineligible for autologous stem cell transplant, as monotherapy for the treatment of adult patients with relapsed and refractory multiple myeloma, whose prior therapy included a proteasome inhibitor and an immunomodulatory agent and who have demonstrated disease progression on the last therapy, and in combination with lenalidomide and dexamethasone, or bortezomib and dexamethasone, for the treatment of adult patients with multiple myeloma who have received at least one prior therapy.[3] For further information on daratumumab, please see the Summary of

Product Characteristics at http://www.ema.europa.eu/docs/en_GB/document_library/EPAR_-_Product_Information/human/004077/WC500207296.pdf.

In August 2012, Janssen Biotech, Inc. and Genmab A/S entered a worldwide agreement, which granted Janssen an exclusive licence to develop, manufacture and commercialise daratumumab.[14]

About Multiple Myeloma

Multiple myeloma (MM) is an incurable blood cancer that starts in the bone marrow and is characterised by an excessive proliferation of plasma cells.[15] More than 45,000 people were diagnosed with multiple myeloma in Europe in 2016, and more than 29,000 patients died.[16] Up to half of newly diagnosed patients do not reach five-year survival,[17] and almost 29% of patients with multiple myeloma will die within one year of diagnosis.[18]

Although treatment may result in remission, unfortunately, patients will most likely relapse as there is currently no cure.[19] Refractory multiple myeloma is when a patient's disease progresses within 60 days of their last therapy.[20,21] Relapsed cancer is when the disease has returned after a period of initial, partial or complete remission.[22] While some patients with MM have no symptoms at all, most patients are diagnosed due to symptoms that can include bone problems, low blood counts, calcium elevation, kidney problems or infections.[23] Patients who relapse after treatment with standard therapies, including PIs and immunomodulatory agents, have poor prognoses and few treatment options available.[24]

About the Janssen Pharmaceutical Companies of Johnson & Johnson

At the Janssen Pharmaceutical Companies of Johnson & Johnson, we are working to create a world without disease. Transforming lives by finding new and better ways to prevent, intercept, treat and cure disease inspires us. We bring together the best minds and pursue the most promising science. We are Janssen. We collaborate with the world for the health of everyone in it. Learn more at www.janssen.com/emea. Follow us at www.twitter.com/janssenEMEA for our latest news.

Cilag GmbH International; Janssen Biotech, Inc.; Janssen Oncology, Inc. and Janssen-Cilag International NV are part of the Janssen Pharmaceutical Companies of Johnson & Johnson.

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Cautions Concerning Forward-Looking Statements

This press release contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995 regarding the benefits of daratumumab for the treatment of patients with multiple myeloma. The reader is cautioned not to rely on these forward-looking statements. These statements are based on current expectations of future events. If underlying assumptions prove inaccurate or known or unknown risks or uncertainties materialise, actual results could vary materially from the expectations and of Janssen-Cilag International NV, Janssen-Cilag Limited, Janssen Biotech, Inc., any of the Janssen Pharmaceutical Companies of Johnson & Johnson and/or Johnson & Johnson. Risks and uncertainties include, but are not limited to: challenges and uncertainties inherent in product research and development, including the uncertainty of clinical success and of obtaining regulatory approvals; uncertainty of commercial success; manufacturing difficulties and delays; competition, including technological advances, new products and patents attained by competitors; challenges to patents; product efficacy or safety concerns resulting in product recalls or regulatory action; changes in behaviour and spending patterns of purchasers of health care products and services; changes to applicable laws and regulations, including global health care reforms; and trends toward health care cost containment. A further list and descriptions of these risks, uncertainties and other factors can be found in Johnson & Johnson's Annual Report on Form 10-K for the fiscal year ended December 31, 2017, including in the sections captioned "Cautionary Note Regarding Forward-Looking Statements" and "Item 1A. Risk Factors," in the company's most recently filed Quarterly Reports on Form 10-Q and in the company's subsequent filings with the Securities and Exchange Commission. Copies of these filings are available online at www.sec.gov, www.jnj.com or on request from Johnson & Johnson. Neither the Janssen Pharmaceutical Companies of Johnson & Johnson nor Johnson & Johnson undertakes to update any forward-looking statement as a result of new information or future events or developments.

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