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**Janssen Announces European Commission Approval of Darzalex®▼
(daratumumab) as Frontline Treatment for Newly Diagnosed Patients with
Multiple Myeloma Who are Transplant Ineligible**

- *Daratumumab is the first monoclonal antibody approved for newly diagnosed patients with multiple myeloma*

BEERSE, BELGIUM, Friday 31 August, 2018 – The Janssen Pharmaceutical Companies of Johnson & Johnson today announced that the European Commission (EC) has granted marketing authorisation for Darzalex® (daratumumab) for use as frontline (initial) therapy. The approval is for the use of daratumumab in combination with bortezomib, melphalan and prednisone (VMP), for the treatment of adult patients with newly diagnosed multiple myeloma who are ineligible for autologous stem cell transplant (ASCT).

The approval is based on results from the randomised, open-label, multicentre Phase 3 ALCYONE (MMY3007) study, published in the [New England Journal of Medicine](#) earlier this year.¹ Daratumumab in combination with VMP reduced the risk of disease progression or death by 50 percent, compared to treatment with VMP alone (Hazard Ratio [HR] = 0.50; 95 percent CI [0.38-0.65], $p < 0.001$).¹ The median progression free survival (PFS) for



daratumumab-VMP had not yet been reached, compared to an estimated median PFS of 18.1 months for patients who received VMP alone.¹

"Today's approval is extremely important for multiple myeloma patients, as providing a frontline treatment option that demonstrates a deep and durable response often provides the best chance at lasting remission. It's all the more remarkable considering it has only been ten years since the first dose of daratumumab was administered in the earliest human studies," said Dr Torben Plesner, MD, the first investigator to administer daratumumab in human trials and Professor, Head of the Department of Hematology at Vejle Hospital, Denmark. "I am proud that patients across Europe now have the option to use a monoclonal antibody as an initial therapy."

"We are incredibly grateful to the patients and physicians who participated in the clinical programme for making this approval possible," said Dr Catherine Taylor, Europe, Middle East and Africa (EMEA) Haematology Therapeutic Area Lead, Janssen. "Our mission has been to ensure daratumumab reaches as many eligible patients as possible and to prolong and improve their quality of life. This is a significant step forward."

The most common (≥ 10 percent) Grade 3/4 treatment emergent adverse events (TEAEs) (daratumumab-VMP vs. VMP) were neutropenia (40 percent vs. 39 percent), thrombocytopenia (34 percent vs. 38 percent), anaemia (16 percent vs. 20 percent) and pneumonia (11 percent vs. 4 percent).¹ One patient in each arm discontinued treatment due to pneumonia and 0.9 percent of patients discontinued daratumumab due to an infection.¹ Twenty-eight percent of patients experienced infusion-related reactions (IRRs) due to daratumumab, and most IRRs occurred during the first infusion.¹ In the daratumumab-VMP arm, 42 percent of patients experienced a serious adverse event (SAE), compared to 33 percent in the VMP arm. The most common (≥ 2 percent) SAE (daratumumab-VMP vs. VMP) was pneumonia (10 percent vs. 3 percent).¹ Additional information about this study can be found at www.ClinicalTrials.gov (NCT02195479).²

In Europe, daratumumab is also indicated for use 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 and as monotherapy for the treatment of adult patients with relapsed and refractory multiple myeloma, whose

prior therapy included a proteasome inhibitor (PI) and an immunomodulatory agent, and who have demonstrated disease progression on the last therapy.³

#ENDS#

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.⁴⁻⁶ 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 (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 that includes nine Phase 3 studies across a range of treatment settings in multiple myeloma, such as in frontline and relapsed settings.^{2,7-14} Additional studies are ongoing or planned to assess its potential for a solid tumour indication and in other malignant and pre-malignant diseases in which CD38 is expressed, such as smouldering myeloma.¹⁵⁻²⁰ For more information, please see www.clinicaltrials.gov.

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.²¹

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.²² MM is the second most common form of blood cancer, with around 40,570 new cases in Europe in 2015.²³ MM most commonly affects people over the age of 65 and is more common in men than in



women.²⁴ The most recent five-year survival data for 2000-2007 show that across Europe, up to half of newly diagnosed patients do not reach five-year survival.²⁵ Almost 29% of patients with MM will die within one year of diagnosis.²⁶

Although treatment may result in remission, unfortunately, patients will most likely relapse as there is currently no cure.²⁷ 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.²⁸ Patients who relapse after treatment with standard therapies, including PIs and immunomodulatory agents, have poor prognoses and few treatment options available.²⁹

About the Janssen Pharmaceutical Companies

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.

Cautions Concerning Forward-Looking Statements

This press release contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995 regarding a recommendation to broaden the existing marketing authorisation for daratumumab. 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 projections of Janssen-Cilag International NV, 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," and in the company's subsequent Quarterly Reports on Form 10-Q and other 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. None of the Janssen Pharmaceutical Companies 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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