



NEWS RELEASE

Janssen's IMBRUVICA® (ibrutinib) Receives Positive CHMP Opinion for Expanded Use in Previously Untreated Chronic Lymphocytic Leukaemia Patients

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Recommendation based on RESONATE™-2 trial which showed IMBRUVICA significantly improved progression-free survival and prolonged overall survival versus chlorambucil

BEERSE, Belgium--(BUSINESS WIRE)-- Janssen-Cilag International NV today announced that the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) has adopted a Positive Opinion, recommending broadening the existing marketing authorisation for ibrutinib as a single agent for the treatment of adult patients with previously untreated chronic lymphocytic leukaemia (CLL).

Ibrutinib is approved for the treatment of adult patients with relapsed or refractory mantle cell lymphoma (MCL), or adult patients with chronic lymphocytic leukaemia (CLL) who have received at least one prior therapy, or in first line in the presence of 17p deletion or TP53 mutation (genetic mutations typically associated with poor treatment outcomes) in patients unsuitable for chemo-immunotherapy and in adult patients with Waldenström's macroglobulinemia (WM) who have received at least one prior therapy, or in first line treatment for patients unsuitable for chemo-immunotherapy.¹

The Positive Opinion of the CHMP was based on data from the Phase 3, randomised, open-label RESONATE™-2 (PCYC-1115) clinical trial, as recently published in **The New England Journal of Medicine (NEJM)**.² Findings showed ibrutinib provided a significant improvement in all efficacy endpoints versus chlorambucil in patients aged 65 or older with newly diagnosed CLL. The progression-free survival (PFS) rate at 18 months was 90 percent for ibrutinib versus 52 percent for chlorambucil.² Ibrutinib also significantly prolonged overall survival (OS) (HR=0.16 percent CI, 0.05, 0.56; P=0.001), with a 24-month survival rate of 98 percent, compared to 85 percent for patients in the



chlorambucil arm.² The safety of ibrutinib in the treatment-naïve CLL patient population was consistent with previously reported studies.² The most common adverse reactions (ARs) (≥ 20 percent) of any Grade in the RESONATE-2 trial for ibrutinib were diarrhoea (42 percent), fatigue (30 percent), cough (22 percent) and nausea (22 percent).²

CLL is a chronic disease, and the prevalence rate in Europe among men and women is approximately 5.87 and 4.01 cases per 100,000 persons per year, respectively. Median overall survival ranges between 18 months and more than 10 years according to the stage of disease.³

"Janssen is proud to be leading the charge with our ongoing efforts to transform the treatment experience for patients with difficult to treat blood cancers, such as CLL," said Jane Griffiths, Company Group Chairman, Janssen Europe, Middle East and Africa. "Ibrutinib continues to demonstrate impressive clinical results, and the data on which this recommendation is based once again highlight its potential to deliver improved patient outcomes for suitable patients."

This regulatory milestone follows the decision by the U.S. Food and Drug Administration on **04 March 2016**, to approve the expanded use of ibrutinib capsules for treatment-naïve patients with CLL.

#ENDS#

About Ibrutinib

Ibrutinib is a first-in-class Bruton's tyrosine kinase (BTK) inhibitor, which works by forming a strong covalent bond with BTK to block the transmission of cell survival signals within the malignant B cells.⁴ By blocking this BTK protein, ibrutinib helps kill and reduce the number of cancer cells. It also slows down the progression of the cancer.¹

Ibrutinib is currently approved in Europe for the treatment of adult patients with relapsed or refractory mantle cell lymphoma (MCL); adult patients with chronic lymphocytic leukaemia (CLL) who have received at least one prior therapy, or in first line patients with CLL in the presence of 17p deletion or TP53 mutation in patients unsuitable for chemo-immunotherapy; and in adult patients with Waldenström's macroglobulinemia (WM) who have received at least one prior therapy, or in first line treatment for patients unsuitable for chemo-immunotherapy.⁵ Regulatory approval for additional uses has not yet been granted. Investigational uses for ibrutinib, alone and in combination with other treatments, are underway in several blood cancers.

Ibrutinib is co-developed by Cilag GmbH International, a member of the Janssen Pharmaceutical Companies, and Pharmacylics LLC, an AbbVie company. Janssen affiliates market ibrutinib in EMEA (Europe, Middle East and Africa) as well as the rest of the world, except in the United States, where Janssen Biotech, Inc. and Pharmacylics co-

market it. Janssen and Pharmacyclics are continuing an extensive clinical development programme for ibrutinib, including Phase 3 study commitments in multiple patient populations - please see the **ibrutinib summary of product** characteristics for further information.

About RESONATE™-2

Findings of the RESONATE™-2 (PCYC-1115) trial showed ibrutinib provided a significant improvement in progression-free survival and other key clinical endpoints versus chlorambucil in patients aged 65 or older with newly diagnosed CLL. The progression-free survival (PFS) rate at 18 months was 90 percent for ibrutinib versus 52 percent for chlorambucil.² Ibrutinib also significantly prolonged overall survival (OS) (HR=0.16 percent CI, 0.05, 0.56; P=0.001), with a 24-month survival rate of 98 percent, compared to 85 percent for patients in the chlorambucil arm.²

The safety of ibrutinib in the previously untreated CLL patient population was consistent with previously reported studies.^{2,5} The adverse reactions (AR) reported in the RESONATE-2 trial reflect exposure to ibrutinib with a median duration of 17.4 months versus a median exposure to chlorambucil of 7.1 months: nearly 2.5 times longer exposure for ibrutinib.² The most common non-haematological ARs of Grade ≥ 3 were pneumonia, hypertension and diarrhoea (all 4 percent).²

About CLL

In most patients, CLL is generally a slow-growing blood cancer of the white blood cells called B-lymphocytes.⁶ The median age at diagnosis is 72 years,⁷ and incidence rates among men and women in Europe are approximately 5.87 and 4.01 cases per 100,000 persons per year, respectively.⁸ CLL is a chronic disease; median overall survival ranges between 18 months and more than 10 years according to the stage of disease.³ The disease eventually progresses in the majority of patients, and patients are faced with fewer treatment options each time. Patients are often prescribed multiple lines of therapy as they relapse or become resistant to treatments.

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. Follow us on www.twitter.com/janssenEMEA for our latest news.

Cilag GmbH International; Janssen Biotech, Inc.; and Janssen-Cilag International NV are part of the Janssen

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Janssen in Oncology

In oncology, our goal is to fundamentally alter the way cancer is understood, diagnosed, and managed, reinforcing our commitment to the patients who inspire us. In looking to find innovative ways to address the cancer challenge, our primary efforts focus on several treatment and prevention solutions. These include a focus on haematological malignancies, prostate cancer and lung cancer; cancer interception with the goal of developing products that interrupt the carcinogenic process; biomarkers that may help guide targeted, individualised use of our therapies; as well as safe and effective identification and treatment of early changes in the tumour microenvironment.

Cautions Concerning Forward-Looking Statements

This press release contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995 regarding product development. 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 materialize, actual results could vary materially from the expectations and projections of Janssen-Cilag International NV, any of the other Janssen companies and/or Johnson & Johnson. Risks and uncertainties include, but are not limited to: challenges and uncertainties inherent in product development, including the uncertainty of clinical success and regulatory approvals; uncertainty of commercial success; competition, including technological advances, new products and patents attained by competitors; manufacturing difficulties and delays; challenges to patents; product efficacy or safety concerns resulting in product recalls or regulatory action; changes in behavior and spending patterns or financial distress of purchasers of health care products and services; and trends toward health care cost containment. A further list and description 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 January 3, 2016, including in Exhibit 99 thereto, and 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. None of the Janssen Pharmaceutical Companies or Johnson & Johnson undertakes to update any forward-looking statement as a result of new information or future events or developments.

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Janssen-Cilag International NV

Media Enquiries:

Natalie Buhl

Mobile: +353 (0)85-744-6696

Email: nbuhl@its.jnj.com

or

Investor Relations:

Lesley Fishman

Phone: +1 732-524-3922

or

Louise Mehrotra

Phone: +1 732-524-6491

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