

For Immediate Release

IMBRUVICA® (ibrutinib) receives positive CHMP opinion for the treatment of patients with previously untreated mantle cell lymphoma (MCL) who would be eligible for autologous stem cell transplant

Pending the European Commission final decision, regimen offers a new standard of care for eligible MCL patients^{1,2}

Positive opinion reinforces Phase 3 TRIANGLE study results by the European MCL Network, showing ibrutinib plus chemotherapy delivers significantly improved overall survival without the burden of transplant^{1,2}

BEERSE, BELGIUM (20 June 2025) – Janssen-Cilag International NV, a Johnson & Johnson company, today announced that the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) has issued a positive opinion recommending approval for an indication extension of IMBRUVICA® (ibrutinib) in frontline mantle cell lymphoma (MCL). The recommendation is for ibrutinib in combination with rituximab, cyclophosphamide, doxorubicin, vincristine and prednisolone (ibrutinib + R-CHOP) alternating with R-DHAP (or R-DHAOx)* without ibrutinib, followed by ibrutinib monotherapy, for the treatment of adult patients with previously untreated MCL who would be eligible for autologous stem cell transplant (ASCT).^{1,2} The extended indication is based on data from the pivotal Phase 3 TRIANGLE study.¹

“Today’s CHMP recommendation is an important milestone for patients with previously untreated MCL, an aggressive disease which requires complex and challenging treatment,” said Ester in’t Groen, EMEA Therapeutic Area Head Haematology, Johnson & Johnson Innovative Medicine. “We are excited by the innovation that ibrutinib continues to bring and hope to soon offer patients this frontline option that has demonstrated improved overall survival without the burden, toxicity and time in hospital associated to an ASCT-based treatment regimen.”

The CHMP recommendation for ibrutinib is supported by data from the randomised Phase 3 TRIANGLE study, conducted by the European MCL Network ([NCT02858258](#)), which evaluated 870 patients across three treatment arms to assess whether the addition of ibrutinib to chemotherapy with or without ASCT could improve outcomes and potentially remove the need for transplant in patients with previously untreated MCL who were suitable for high-dose treatment.³ The study demonstrated that adding ibrutinib to chemotherapy followed by a 2-year fixed-duration maintenance period instead of ASCT provides significantly longer overall survival and superior failure-free survival compared to the chemotherapy regimen including ASCT.¹

“At Johnson & Johnson, we are committed to improving outcomes for patients facing complex blood cancers,” said Jessica Vermeulen, Vice President, Lymphoma & Leukemia Disease Area Stronghold Leader, Johnson & Johnson Innovative Medicine. “The TRIANGLE study, conducted by the European MCL Network, affirms the potential emergence of a new standard of care for transplant eligible patients diagnosed with MCL and represents the first major step forward for these patients in many years. We look forward to working together to bring this transplant-free therapeutic option to the MCL community.”

MCL is a rare, aggressive form of non-Hodgkin lymphoma.⁴ The current standard of care in the frontline setting for young and fit patients is a chemotherapy regimen including ASCT, which can be associated with severe toxicities, lengthy hospital stays and high health resource utilisation.^{5,6} The addition of fixed-duration ibrutinib to chemotherapy offers the potential for long treatment-free remissions while avoiding the burden of stem cell transplant.^{1,2} If approved, ibrutinib would become the first Bruton’s Tyrosine Kinase inhibitor (BTKi) for frontline treatment of transplant eligible MCL patients.

FOR EUROPEAN AND UK MEDICAL AND TRADE MEDIA ONLY

About the TRIANGLE Study

TRIANGLE ([NCT02858258](#)) is an ongoing, European, randomised, open-label, Phase 3 investigator initiated study (IIS) led by the European MCL Network.^{2,3} It compared three treatment arms: ibrutinib combined with standard induction immunochemotherapy with or without autologous stem cell transplantation (ASCT) followed by 2-year fixed-duration ibrutinib therapy versus induction immunochemotherapy followed by ASCT.³ The trial enrolled 870 patients with previously untreated mantle cell lymphoma (MCL).³ The primary endpoint was failure-free survival (FFS).³ Overall survival (OS) and safety and tolerability were also assessed.³ The age for participation was ≥18 years and ≤65 years for patients who were suitable for high-dose treatment.³ The study was conducted by the European Mantle Cell Lymphoma Network across 14 countries.³

About Ibrutinib

Ibrutinib is a once-daily oral medication that is jointly developed and commercialised by Janssen Biotech, Inc. and Pharmacyclis LLC, an AbbVie company.⁷ Ibrutinib blocks the BTK protein, which is needed by normal and abnormal B-cells, including specific cancer cells, to multiply and spread.⁸ By blocking BTK, ibrutinib may help move abnormal B-cells out of their nourishing environments and inhibits their proliferation.⁹

Ibrutinib is approved in more than 100 countries and has been used to treat more than 325,000 patients worldwide.¹⁰ There are more than 50 company-sponsored clinical trials, including 18 Phase 3 studies, over 11 years evaluating the efficacy and safety of ibrutinib.^{7,11} In October 2021, ibrutinib was added to the World Health Organization's Model Lists of Essential Medicines (EML), which refers to medicines that address global health priorities and which should be available and affordable for all.¹²

Ibrutinib was first approved by the European Commission (EC) in 2014, and approved indications to date include:¹⁷

- As a single agent or in combination with rituximab or obinutuzumab or venetoclax for the treatment of adult patients with previously untreated chronic lymphocytic leukaemia (CLL)
- As a single agent or in combination with bendamustine and rituximab (BR) for the treatment of adult patients with CLL who have received at least one prior therapy
- As a single agent for the treatment of adult patients with relapsed or refractory MCL
- As a single agent for the treatment of adult patients with Waldenström's macroglobulinaemia (WM) who have received at least one prior therapy, or in first line treatment for patients unsuitable for chemo-immunotherapy. In combination with rituximab for the treatment of adult patients with WM

For a full list of adverse events and information on dosage and administration, contraindications and other precautions when using ibrutinib please refer to the [Summary of Product Characteristics](#).

About Mantle Cell Lymphoma (MCL)

MCL is an aggressive, incurable type of blood cancer that spreads quickly and originates from the B lymphocytes, a functional component of the human immune system.⁴ The overall incidence of MCL globally is approximately 1-2 cases per 100,000 persons per year and it has a higher prevalence in men than women.⁵⁵ MCL is diagnosed at a median age of 65 years and while patient outcomes have dramatically improved over the latest few decades, MCL remains a difficult disease to treat with patients relapsing or becoming resistant to therapy.⁵⁵

About Johnson & Johnson

At Johnson & Johnson, we believe health is everything. Our strength in healthcare innovation empowers us to build a world where complex diseases are prevented, treated, and cured, where treatments are smarter and less invasive, and solutions are personal. Through our expertise in Innovative Medicine and MedTech, we are uniquely positioned to innovate across the full spectrum of healthcare solutions today to deliver the breakthroughs of tomorrow, and profoundly impact health for humanity.

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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 product development and the potential benefits and treatment impact of 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 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; competition, including technological advances, new products and patents attained by competitors; challenges to patents; 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 most recent Annual Report on Form 10-K, including in the sections captioned "Cautionary Note Regarding Forward-Looking Statements" and "Item 1A. Risk Factors," and in Johnson & Johnson'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 <http://www.sec.gov/>, <http://www.jnj.com/> or on request from Johnson & Johnson. Johnson & Johnson does not undertake to update any forward-looking statement as a result of new information or future events or developments.

**R-DHAP refers to rituximab, dexamethasone, high-dose cytarabine (Ara-C) and cisplatin; R-DHAOx refers to rituximab, dexamethasone, high-dose cytarabine (Ara-C) and oxaliplatin.*

¹ Dreyling, et al. Role of Autologous Stem Cell Transplantation in the Context of Ibrutinib-Containing First-Line Treatment in Younger Patients with Mantle Cell Lymphoma: Results from the Randomized Triangle Trial By the European MCL Network. Oral presentation. Abstract # 240. 2024 American Society of Hematology Annual Meeting.

² Dreyling, et al. Ibrutinib combined with immunochemotherapy with or without autologous stem-cell transplantation versus immunochemotherapy and autologous stem-cell transplantation in previously untreated patients with mantle cell lymphoma (TRIANGLE): a three-arm, randomised, open-label, phase 3 superiority trial of the European Mantle Cell

Lymphoma Network. The Lancet, 2024; 403:10441:2293 - 2306.

³ ClinicalTrials.gov. ASCT After a Rituximab/Ibrutinib/Ara-c Containing induction in Generalized Mantle Cell Lymphoma. NCT02858258. Available at: <https://clinicaltrials.gov/study/NCT02858258>. Last accessed: June 2025.

⁴ Jain P. and Wang M. L. Mantle cell lymphoma in 2022-A comprehensive update on molecular pathogenesis, risk stratification, clinical approach, and current and novel treatments, American Journal of Hematology. 2022; 97;5:638–56.

⁵ Dreyling, et al. Newly diagnosed and relapsed mantle cell lymphoma: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Annals of Oncology, 2017; 28:62-71

⁶ Monga, N., Garside, J., Davids, M.S. et al. Systematic Literature Review of Economic Evaluations, Costs/Resource Use, and Quality of Life in Patients with Mantle Cell Lymphoma. Pharmacoeconomics Open, 2021; 5:175–186.

⁷ European Medicines Agency. IMBRUVICA Summary of Product Characteristics. September 2023. Available at: https://www.ema.europa.eu/en/documents/product-information/imbruvica-epar-product-information_en.pdf. Last accessed: June 2025.

⁸ Turetsky A, et al. Single cell imaging of Bruton's tyrosine kinase using an irreversible inhibitor. Sci Rep. 2014;4:4782

⁹ de Rooij MF, et al. The clinically active BTK inhibitor PCI-32765 targets B-cell receptor- and chemokine-controlled adhesion and migration in chronic lymphocytic leukemia. Blood. 2012. 119(11):2590-2594

¹⁰ J&J Data on File (RF-419273). Patients Treated on Imbruvica Worldwide. May 2024.

¹¹ Pollyea DA, et al. A Phase I Dose Escalation Study of the Btk Inhibitor PCI-32765 in Relapsed and Refractory B Cell Non-Hodgkin Lymphoma and Use of a Novel Fluorescent Probe Pharmacodynamic Assay. Blood. 2009. 114(22): 3713

¹² World Health Organization. WHO prioritizes access to diabetes and cancer treatments in new Essential Medicines Lists. Available at: <https://www.who.int/news/item/01-10-2021-who-prioritizes-access-to-diabetes-and-cancer-treatments-in-new-essential-medicines-lists>. Last accessed: June 2025.