U NOVARTIS

Novartis International AG Novartis Global Communications CH-4002 Basel Switzerland

https://www.novartis.com https://twitter.com/novartisnews

MEDIA UPDATE

Novartis Scemblix[®], with novel mechanism of action, approved by the European Commission for adult patients with chronic myeloid leukemia

- Approval based on results from pivotal Phase III ASCEMBL trial, in which Scemblix[®] (asciminib) nearly doubled the major molecular response rate vs. Bosulif[®]* (bosutinib) (25.5% vs. 13.2%) with a more than three times lower discontinuation rate due to adverse reactions (5.8% vs 21.1%) at 24 weeks and confirmed at 96 weeks^{1,2}
- Known in scientific literature as a STAMP inhibitor, Scemblix offers a different therapeutic option to patients with chronic myeloid leukemia (CML) who struggle with intolerance or inadequate response after at least two prior tyrosine kinase inhibitor treatments^{1,2}
- Novartis maintains its 20-year commitment to transform the standard of care in CML, hoping to bring Scemblix to more patients around the world, with ongoing regulatory filings and additional trials in other settings underway

Basel, August 29, 2022 — Novartis today announced that the European Commission (EC) has approved Scemblix[®] (asciminib) for the treatment of adult patients with Philadelphia chromosome-positive chronic myeloid leukemia in chronic phase (Ph+ CML-CP), previously treated with two or more tyrosine kinase inhibitors (TKIs)¹. Scemblix is the first CML treatment in Europe that works by specifically targeting the ABL myristoyl pocket (also known as a STAMP inhibitor in scientific literature), offering a reimagined treatment approach for patients who experience intolerance and/or resistance to currently available TKI therapies^{1,2}.

"Until now, patients with CML in Europe had oral TKI therapies with the same mechanism of action to turn to, and those experiencing significant side effects or resistance to these treatment options would often cycle between these very similar therapies, with little success in controlling their disease or improving their quality of life," said Dr. Andreas Hochhaus, Head of the Department of Hematology and Medical Oncology at Jena University Hospital in Germany. "The approval of Scemblix in Europe is a timely milestone that will help many patients find hope for the management of their CML."

The EC approval for Scemblix follows a positive opinion by the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) in June, and the previous designation of Scemblix as an orphan drug; and it is applicable to all 27 European Union member states plus Iceland, Norway and Liechtenstein. The approval is based on results from the pivotal Phase III ASCEMBL trial, which showed a near doubling in MMR rate

for patients treated with Scemblix vs. Bosulif[®]* (bosutinib) (25.5% vs. 13.2%, [*P*=.029]), with a more than three times lower discontinuation rate due to adverse reactions (5.8% vs. 21.1%), at the 24-week primary endpoint^{1,2}. These results were confirmed in the <u>96-week longer-term</u> follow-up where the MMR rate was more than double with Scemblix (37.6%, 95% CI: 29.99-45.65) compared with Bosulif (15.8%, 95% CI: 8.43-25.96) and the discontinuation rate due to adverse reactions was 7.7% for Scemblix and 26.3% for Bosulif. These data were shared as oral presentations during the annual meetings of the American Society for Clinical Oncology (ASCO) and the European Hematology Association (EHA) in June 2022^{3,4}. Based on all patients exposed to Scemblix in the ASCEMBL study and in the phase I study, the most common (incidence ≥ 20%) adverse reactions in patients receiving asciminib were musculoskeletal pain (37.1%), upper respiratory tract infections (28.1%), thrombocytopenia (27.5%), fatigue (27.2%), headache (24.2%), arthralgia (21.6%), increased pancreatic enzymes (21.3%), abdominal pain (21.3%), diarrhoea (20.5%) and nausea (20.2%)¹.

"Approval of Scemblix from the European Commission is a critical milestone to help bring this novel treatment to patients living with CML in Europe," said Haseeb Ahmad, President, Europe Innovative Medicines, Novartis. "Building on more than twenty years of innovation in CML, we are excited by the potential to once again transform the standard of care for more patients around the world."

It is estimated that, every year, more than 6,300 people will be diagnosed with CML in Europe⁵. While many patients will benefit from available TKI therapies, a significant proportion may experience intolerance or resistance to these treatments⁶⁻¹³.

About Scemblix[®] (asciminib)

Scemblix is the first CML treatment that acts as a STAMP inhibitor, specifically targeting the ABL myristoyl pocket^{1,2}. This novel mechanism of action may help address resistance in patients with CML previously treated with two or more TKIs and overcome mutations at the defective BCR::ABL1 gene, which is associated with the over-production of leukemic cells^{1,2,14-20}.

Scemblix represents an important development for patients who experience resistance and/or intolerance to currently available TKI therapies, and it is being studied across multiple treatment lines for CML-CP, both as a monotherapy and in combination^{1,14-28}. Specifically, the ASC4FIRST Phase III study (NCT04971226) evaluates Scemblix in newly diagnosed adult patients with Ph+ CML-CP vs. an investigator-selected TKI²².

Novartis has initiated regulatory filings for Scemblix in multiple countries and regions across the globe. In October 2021, the US FDA granted accelerated approval of Scemblix for adult patients with Ph+ CML-CP, previously treated with two or more TKIs based on MMR rate at 24 weeks, and full approval for adult patients with Ph+ CML-CP with the T315I mutation. In accordance with the Accelerated Approval Program, continued approval for the first indication may be contingent upon verification and description of clinical benefit from confirmatory evidence. The longer-term, 96-week efficacy and safety data have been shared with the FDA and are currently under evaluation through a priority review²⁹.

Scemblix has received approval in several countries outside the US, including Japan, Switzerland, and the United Kingdom, for adult patients with Ph+ CML-CP with resistance or intolerance to at least two or more previous therapies.

Disclaimer

This media update contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements can generally be identified by words such as "potential," "can," "will," "plan," "may," "could," "would," "expect," "anticipate," "look forward," "believe," "committed," "investigational," "pipeline," "launch," or similar terms, or by express or implied discussions regarding potential marketing approvals, new indications or labeling for the investigational or approved products

described in this media update, or regarding potential future revenues from such products. You should not place undue reliance on these statements. Such forward-looking statements are based on our current beliefs and expectations regarding future events, and are subject to significant known and unknown risks and uncertainties. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those set forth in the forward-looking statements. There can be no guarantee that the investigational or approved products described in this media update will be submitted or approved for sale or for any additional indications or labeling in any market, or at any particular time. Nor can there be any guarantee that such products will be commercially successful in the future. In particular, our expectations regarding such products could be affected by, among other things, the uncertainties inherent in research and development, including clinical trial results and additional analysis of existing clinical data; regulatory actions or delays or government regulation generally; global trends toward health care cost containment, including government, payor and general public pricing and reimbursement pressures and requirements for increased pricing transparency; our ability to obtain or maintain proprietary intellectual property protection; the particular prescribing preferences of physicians and patients; general political, economic and business conditions, including the effects of and efforts to mitigate pandemic diseases such as COVID-19; safety, quality, data integrity or manufacturing issues; potential or actual data security and data privacy breaches, or disruptions of our information technology systems, and other risks and factors referred to in Novartis AG's current Form 20-F on file with the US Securities and Exchange Commission. Novartis is providing the information in this media update as of this date and does not undertake any obligation to update any forward-looking statements contained in this media update as a result of new information, future events or otherwise.

About Novartis

Novartis is reimagining medicine to improve and extend people's lives. As a leading global medicines company, we use innovative science and digital technologies to create transformative treatments in areas of great medical need. In our quest to find new medicines, we consistently rank among the world's top companies investing in research and development. Novartis products reach nearly 800 million people globally and we are finding innovative ways to expand access to our latest treatments. About 108,000 people of more than 140 nationalities work at Novartis around the world. Find out more at https://www.novartis.com.

Novartis is on Twitter. Sign up to follow @Novartis at https://twitter.com/novartisnews For Novartis multimedia content, please visit https://www.novartis.com/news/media-library For questions about the site or required registration, please contact media.relations@novartis.com

*Bosulif is a registered trademark of Pfizer

References

- 1. Scemblix Summary of Product Characteristics, 2022.
- 2. Rea D, et al. A Phase 3, Open-Label, Randomized Study of Asciminib, a STAMP Inhibitor, vs Bosutinib in CML After≥ 2 Prior TKIs. Blood. 2021. DOI: 10.1182/blood.2020009984. PMID: 34407542.
- 3. Cortes JE, et al. Oral presentation at ASCO 2022; June 3-7, 2022. Chicago IL and virtual. Abstract 7004
- 4. Réa D, et al. Oral presentation at EHA 2022; June 9-17, 2022. Vienna Austria and virtual. Abstract S155 5. Hoffmann, V. Baccarani, M. Hasford, J. et al. The EUTOS population-based registry: incidence and
- Hoffmann, V., Baccarani, M., Hasford, J. et al. The EUTOS population-based registry: incidence and clinical characteristics of 2904 CML patients in 20 European Countries. Leukemia 29, 1336–1343 (2015). https://doi.org/10.1038/leu.2015.73
- Flis S, et al. Chronic myelogenous leukemia, a still unsolved problem: pitfalls and new therapeutic possibilities. Drug Des Devel Ther. 2019;13:825-843.
- Akard LP, et al. The "Hit Hard and Hit Early" Approach to the Treatment of Chronic Myeloid Leukemia: Implications of the Updated National Comprehensive Cancer Network Clinical Practice Guidelines for Routine Practice. Clin Adv Hematol Oncol. 2013;11(7):421-432.
- 8. Cortes JE, et al. Long-term bosutinib for chronic phase chronic myeloid leukemia after failure of imatinib plus dasatinib and/or nilotinib. Am J Hematol. 2016;91(12):1206-1214.
- 9. Cortes JE, et al. Ponatinib efficacy and safety in Philadelphia chromosome–positive leukemia: Final 5-year results of the phase 2 PACE trial. Blood. 2018;132(4):393-404.
- 10. Garg RJ, et al. The use of nilotinib or dasatinib after failure to 2 prior tyrosine kinase inhibitors: long-term follow-up. Blood. 2009;114(20):4361-4368

- 11. Hochhaus A, et al. European LeukemiaNet 2020 recommendations for treating chronic myeloid leukemia. Leukemia. 2020;34:966-984
- 12. Cortes JE., et al. Final 5-Year Study Results of DASISION: The Dasatinib Versus Imatinib Study in Treatment-Naïve Chronic Myeloid Leukemia Patients Trial. J Clin Oncol. 2016;34:2333-2340.
- 13. Steegmann JL., et al. European LeukemiaNet recommendations for the management and avoidance of adverse events of treatment in chronic myeloid leukaemia. Leukemia. 2016;30:1648-1671.
- Wylie AA, et al. The allosteric inhibitor ABL001 enables dual targeting of BCR–ABL1. Nature. 2017;543(7647):733-737.
- Schoepfer J, et al. Discovery of Asciminib (ABL001), an Allosteric Inhibitor of the Tyrosine Kinase Activity of BCR-ABL1. J Med Chem. 2018;61(18):8120-8135.
- Hughes TP, et al. Asciminib in Chronic Myeloid Leukemia after ABL Kinase Inhibitor Failure. N Engl J Med. 2019; 381(24):2315-2326.
- 17. Hughes TP, et al. Expanded Phase 1 Study of ABL001, a Potent, Allosteric Inhibitor of BCR-ABL, Reveals Significant and Durable Responses in Patients with CML-Chronic Phase with Failure of Prior TKI Therapy. Poster presented at: ASH Annual Meeting & Exposition; Dec. 5, 2016.
- Ottmann OG, et al. ABL001, a Potent, Allosteric Inhibitor of BCR-ABL, Exhibits Safety and Promising Single- Agent Activity in a Phase I Study of Patients with CML with Failure of Prior TKI Therapy. Blood. 2015;126(23):138.
- Mauro MJ, et al. Combination of Asciminib Plus Nilotinib (NIL) or Dasatinib (DAS) in Patients (PTS) with Chronic Myeloid Leukemia (CML): Results from a Phase 1 Study. Poster presented at: EHA Annual Meeting; June 15, 2019.
- Cortes JE, et al. Combination Therapy Using Asciminib Plus Imatinib (IMA) in Patients (PTS) with Chronic Myeloid Leukemia (CML): Results from a Phase 1 Study. Poster presented at: EHA Annual Meeting; June 15, 2019.
- ClinicalTrials.gov. 2017. Study of Efficacy of CML-CP Patients Treated with ABL001 Versus Bosutinib, Previously Treated With 2 or More TKIs. [online] Available at: https://clinicaltrials.gov/ct2/show/NCT03106779.
- 22. ClinicalTrials.gov. 2021. A Study of Oral Asciminib Versus Other TKIs in Adult Patients With Newly Diagnosed Ph+ CML-CP. [online] Available at: https://clinicaltrials.gov/ct2/show/NCT04971226.
- ClinicalTrials.gov. 2020. Asciminib in Monotherapy for Chronic Myeloid Leukemia in Chronic Phase (CML-CP) With and WithoutT315I Mutation (AIM4CML). [online] Available at: https://clinicaltrials.gov/ct2/show/NCT04666259.
- 24. ClinicalTrials.gov. 2018. Study of Efficacy And Safety Of Asciminib In Combination With Imatinib In Patients With Chronic Myeloid Leukemia In Chronic Phase (CML-CP). [online] Available at: https://clinicaltrials.gov/ct2/show/NCT03578367.
- 25. ClinicalTrials.gov. 2021. Study of Efficacy and Safety of CML-CP Patients Treated With Asciminib Versus Best Available Therapy, Previously Treated With 2 or More Tyrosine Kinase Inhibitors. [online] Available at: https://clinicaltrials.gov/ct2/show/NCT04795427.
- 26. ClinicalTrials.gov. 2014. A Phase I Study of Oral ABL001 in Patients With CML or Ph+ ALL. [online] Available at: https://clinicaltrials.gov/ct2/show/NCT02081378.
- 27. ClinicalTrials.gov. 2021 Asciminib Treatment Optimization in ≥ 3rd Line CML-CP. [online] Available at: https://clinicaltrials.gov/ct2/show/NCT04948333
- 28. ClinicalTrials.gov. 2021. Study to Determine the Dose and Safety of Asciminib in Pediatric Patients With Chronic Myeloid Leukemia [online] Available at: https://clinicaltrials.gov/ct2/show/NCT04925479
- 29. Scemblix [prescribing information]. East Hanover, NJ: Novartis Pharmaceuticals Corp; 2021.

###

Novartis Media Relations

E-mail: media.relations@novartis.com

Anja von Treskow Novartis External Communications +41 79 392 8697 (mobile) anja.von_treskow@novartis.com Michael Billings Novartis Oncology Communications +1 862 778 8656 (direct) +1 201 400 1854 (mobile) michael.billings@novartis.com

Julie Masow Novartis US External Communications +1 862 579 8456 julie.masow@novartis.com

Novartis Investor Relations

Central investor relations line: +41 61 324 7944 E-mail: investor.relations@novartis.com

Central		North America
Samir Shah	+41 61 324 7944	Sloan Simpson

+1 862 345 4440

Nicole Zinsli-Somm	+41 61 324 380	Alina Levchuk	+1 862 778 3372
Isabella Zinck	+41 61 324 7188	Parag Mahanti	+1 973-876-4912