

Novartis International AG Novartis Global Communications CH-4002 Basel Switzerland

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

MEDIA & INVESTOR RELEASE

Longer-term Novartis Kisqali® NATALEE data show durable reduction in distant recurrence in broad population of patients with early breast cancer

- Reduction in distant recurrence consistently deepened beyond 3-year Kisqali treatment duration in patients with node-positive (N+) and high-risk node-negative (N0) disease, as well as between anatomical stages¹
- Real-world 5-year distant recurrence data in high-risk patients with HR+/HER2early breast cancer (EBC), regardless of nodal status, highlights importance of adding a CDK4/6 inhibitor to endocrine therapy for all eligible patients²
- Late-breaking Kisqali data presentations at SABCS follow recent FDA and EMA approvals and recognition by NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines^{®*}) as only Category 1 preferred adjuvant treatment for both N+ and high-risk N0 disease in combination with AI³

Basel, December 10, 2024 – Novartis today announced results from an updated analysis of the pivotal Phase III NATALEE trial of Kisqali[®] (ribociclib) that underscore the extended efficacy beyond the duration of treatment in combination with endocrine therapy (ET). Results showed a sustained reduction in distant recurrence of 28.5% (HR=0.715; 95% CI 0.604-0.847; nominal P<0.0001), compared to ET alone, in patients with stage II and III hormone receptor-positive/human epidermal growth factor receptor 2-negative (HR+/HER2-) early breast cancer (EBC)¹.

Reduction in distant recurrence, known as distant disease-free survival (DDFS), is a decrease in the rate of cancer returning and spreading to other organs. The DDFS with Kisqali was consistent across all pre-specified patient subgroups, including those with node-negative (N0) disease¹. These late-breaking data are being presented at the 2024 San Antonio Breast Cancer Symposium (SABCS).

"In day-to-day practice, we see a real and persistent risk of breast cancer coming back after early diagnosis, often as metastatic disease," said Paolo Tarantino, M.D., Advanced Fellow at Dana-Farber Cancer Institute and Harvard Medical School. "The latest NATALEE and real-world data presented at SABCS reaffirm we can better address risk of recurrence for all patients at high-risk, including selected patients with node-negative disease, by offering them adjuvant CDK4/6 inhibitor treatment in addition to endocrine therapy."

DDFS results across pre-specified subgroups^{1,4**}:

Subgroup	Hazard Ratio	95% CI
Intention-To-Treat Population	0.715	0.604-0.847

AJCC Tumor Stage IIA	0.396	0.218-0.720
AJCC Tumor Stage IIB	0.806	0.524-1.238
AJCC Tumor Stage IIIA	0.697	0.524-0.926
AJCC Tumor Stage IIIB	0.569	0.326-0.994
AJCC Tumor Stage IIIC	0.878	0.649-1.188
Node-negative disease	0.696	0.403-1.204
Node-positive disease	0.726	0.608-0.867

Safety remains consistent with previous reports, and no new safety signals were identified⁵. Adverse events (AEs) of special interest (grade 3 or higher) were neutropenia (44.4%), liver-related AEs (e.g., elevated transaminases) (8.6%), and QT interval prolongation (1.0%)⁵.

Real-World Risk of Distant Recurrence

Further, real-world evidence presented at the meeting highlights the relatively high incidence of distant recurrences within 5 years despite ET monotherapy for patients at high-risk, regardless of nodal involvement².

"On the heels of its U.S. FDA and EMA approvals in early breast cancer, it is encouraging to see the continued benefit of adding Kisqali to standard endocrine therapy to help reduce the risk of recurrence," said Jeff Legos, Executive Vice President, Global Head of Oncology Development, Novartis. "These data, together with the recent NCCN Guidelines[®] Category 1 preferred treatment recommendation for all eligible patients with early breast cancer, reinforce the opportunity to evolve adjuvant treatment to help a broader group of people."

Additional research presented at the meeting further demonstrates the ongoing focus of Novartis to advance the care of people with breast cancer, including studies investigating the potential of radioligand therapies in the treatment of metastatic breast cancer (MBC)⁶.

*NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way.

**The 4-year DDFS analysis was not prespecified and the trial was not powered to demonstrate statistical significance of these results.

About NATALEE

NATALEE is a global Phase III multi-center, randomized, open-label trial to evaluate the efficacy and safety of Kisqali with ET as an investigational adjuvant treatment versus ET alone in patients with stage II and III HR+/HER2- EBC, being conducted in collaboration with TRIO^{7,8}. The adjuvant ET in both treatment arms was a non-steroidal aromatase inhibitor (NSAI; anastrozole or letrozole) and goserelin if applicable^{7,8}. The primary endpoint of NATALEE is invasive disease-free survival (iDFS) as defined by the Standardized Definitions for Efficacy End Points (STEEP) criteria^{7,8}. A total of 5,101 adult patients with HR+/HER2-EBC across 20 countries were randomized in the trial^{7,8}.

About Kisqali® (ribociclib)

Kisqali® (ribociclib) is a selective cyclin-dependent kinase inhibitor, a class of drugs that help slow the progression of cancer by inhibiting two proteins called cyclin-dependent kinase 4 and 6 (CDK4/6). These proteins, when over-activated, can enable cancer cells to grow and divide too quickly. Targeting CDK4/6 with enhanced precision may play a role in ensuring that cancer cells do not continue to replicate uncontrollably.

Kisqali has been approved as a treatment for breast cancer by regulatory authorities in 99 countries worldwide, including the U.S. FDA and the European Commission^{9,10}. In the US, Kisqali is indicated in combination with an AI as an adjuvant treatment for adults with HR+/HER2- stage II and III early breast cancer at high risk of recurrence, as well as for the treatment of adults with HR+/HER2- advanced or MBC as initial ET; Kisqali is also approved in the metastatic indication in combination with fulvestrant as initial ET or following disease progression on ET in post-menopausal women or in men⁹. In the EU, Kisqali is approved for the treatment of women with HR+/HER2- advanced or MBC in combination with either an AI or fulvestrant as initial ET or following disease progression¹⁰. In pre- or peri-menopausal women, the ET should be combined with a luteinizing hormone-releasing hormone agonist^{9,10}.

In EBC, ribociclib (Kisqali) is the only CDK4/6 inhibitor recommended by the NCCN Guidelines® for breast cancer for both all node-positive disease as well as for patients with no nodal involvement with high-risk disease characteristics, such as tumor size >5 cm, or for tumors sized 2-5 cm, either Grade 2 with high genomic risk/Ki-67 ≥20% or Grade 3³. In MBC, Kisqali has consistently demonstrated statistically significant overall survival benefit across three Phase III trials¹¹-²¹. The NCCN Guidelines® also recommend ribociclib (Kisqali) as the only Category 1 preferred CDK4/6 inhibitor for first-line treatment of people living with HR+/HER2- when combined with an AI³, making Kisqali the preferred first-line treatment of choice for US prescribers in HR+/HER2- MBC.

In addition, Kisqali has achieved the highest score (A) on the European Society for Medical Oncology-Magnitude of Clinical Benefit Scale (ESMO-MCBS) for EBC²²; and has the highest rating of any CDK4/6 inhibitor on the ESMO Magnitude of Clinical Benefit Scale, achieving a score of five out of five for first-line pre-menopausal patients with HR+/HER2- advanced breast cancer²³. Further, Kisqali in combination with either letrozole or fulvestrant has uniquely, among other CDK4/6 inhibitors, received a score of four out of five for post-menopausal patients with HR+/HER2- advanced breast cancer treated in the first line²⁴.

Kisqali was developed by Novartis under a research collaboration with Astex Pharmaceuticals.

Please see full Prescribing Information for Kisqali, available at www.Kisqali.com.

About Novartis in Breast Cancer

For more than 30 years, Novartis has been at the forefront of driving scientific advancements for people touched by breast cancer and improving clinical practice in collaboration with the global community. With one of the most comprehensive breast cancer portfolios and pipeline, Novartis leads the industry in discovery of new therapies and combinations in HR+/HER2-breast cancer, the most common form of the disease.

Disclaimer

This press release 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; 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 an innovative medicines company. Every day, we work to reimagine medicine to improve and extend people's lives so that patients, healthcare professionals and societies are empowered in the face of serious disease. Our medicines reach more than 250 million people worldwide.

Reimagine medicine with us: Visit us at https://www.novartis.com and connect with us on LinkedIn, Facebook, X/Twitter and Instagram.

References

- Hurvitz S et al. Distant disease-free survival (DDFS) across key subgroups from the phase 3 NATALEE trial of ribociclib (RIB) plus a nonsteroidal aromatase inhibitor (NSAI) in patients with HR+/HER2- early breast cancer (EBC). Presented at the San Antonio Breast Cancer Symposium, December 12, 2024. Texas, USA.
- 2. Tarantino P et al. Risk of recurrence in real-world (RW) NATALEE- and monarchE-eligible populations of patients with HR+/HER2- early breast cancer (EBC) in an electronic health record (EHR)-derived database. Presented at the San Antonio Breast Cancer Symposium, December 11, 2024. Texas, USA.
- NCCN Guidelines. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) Breast Cancer. Accessed December 2024. https://www.nccn.org
- 4. Hortobagyi G, Stroyakovskiy D, Yardley DA, et al. Ribociclib (RIB) + nonsteroidal aromatase inhibitor (NSAI) as adjuvant treatment in patients with HR+/HER2- early breast cancer: final invasive disease-free survival (iDFS) analysis from the NATALEE trial. Presented at San Antonio Breast Cancer Symposium (SABCS); December 8, 2023; San Antonio, USA.
- Fasching PA. Adjuvant Ribociclib (RIB) Plus Nonsteroidal Aromatase Inhibitor (NSAI) in Patients (Pts) With HR+/HER2- Early Breast Cancer (EBC): 4-Year Outcomes from the NATALEE Trial. LBA13. Proffered Paper presented at the European Society for Medical Oncology Congress, September 16, 2024. Barcelona, Spain.
- 6. Campone M et al. Phase I/II study of the novel radioligand therapy [Lu]Lu-NeoB plus capecitabine in patients with ER+/HER2- advanced breast cancer (ABC) with GRPR expression after progression on prior endocrine therapy (ET) plus a CDK4/6 inhibitor (CDK4/6i) for ABC. Presented at the San Antonio Breast Cancer Symposium, December 12, 2024. Texas, USA.
- 7. Slamon D, Lipatov O, Nowecki Z, et al. Ribociclib plus Endocrine Therapy in Early Breast Cancer. N Engl J Med. 2024;390(12):1080-1091. doi:10.1056/NEJMoa2305488
- Clinicaltrials.gov. NCT03701334. A Trial to Evaluate Efficacy and Safety of Ribociclib With Endocrine Therapy as Adjuvant Treatment in Patients With HR+/ HER2- Early Breast Cancer (NATALEE). Available from: https://clinicaltrials.gov/study/NCT03701334. Accessed December 2024.
- 9. Kisqali. Prescribing Information (US FDA). Novartis Pharmaceuticals Corporation; 2017. Accessed December 2024. https://www.novartis.com/us-en/sites/novartis_us/files/kisqali.pdf
- 10. Kisqali. Summary of product characteristics (SmPC). Novartis Europharm Limited; 2017. Accessed December 2024. https://www.ema.europa.eu/en/documents/product-information/kisqali-epar-product-information_en.pdf
- 11. Yardley DA et al. Pooled exploratory analysis of survival in patients (pts) with HR+/HER2- advanced breast cancer (ABC) and visceral metastases (mets) treated with ribociclib (RIB) + endocrine therapy (ET) in the MONALEESA (ML) trials. Poster presented at the European Society of Medical Oncology Congress. September 9-13, 2022. Paris, France.
- 12. Neven P et al. Updated overall survival (OS) results from the first-line (1L) population in the Phase III MONALEESA-3 trial of postmenopausal patients with HR+/HER2- advanced breast cancer (ABC) treated with ribociclib (RIB) + fulvestrant (FUL). Mini oral presented at the European Society for Medical Oncology Breast Cancer Congress, May 4, 2022. Paris, France.
- 13. Hortobagyi GN, Stemmer SM, Burris HA, et al. Overall Survival with Ribociclib plus Letrozole in Advanced Breast Cancer. *N Engl J Med*. 2022;386(10):942-950. doi:10.1056/NEJMoa2114663

- 14. Hortobagyi GN et al. Overall survival (OS) results from the phase III MONALEESA (ML)-2 trial of postmenopausal patients with hormone receptor positive/human epidermal growth factor receptor 2 negative (HR+/HER2-) advanced breast cancer (ABC) treated with endocrine therapy (ET) ± ribociclib. LBA 17. Proffered paper presented at the European Society of Medical Oncology Congress, September 16-21, 2021. Lugano, Switzerland.
- Im SA, Lu YS, Bardia A, et al. Overall survival with ribociclib plus endocrine therapy in breast cancer. N Engl J Med. 2019;381(4):307-316. doi:10.1056/NEJMoa1903765
- 16. Slamon DJ, Neven P, Chia S, et al. Overall Survival with Ribociclib plus Fulvestrant in Advanced Breast Cancer. N Engl J Med. 2020;382(6):514-524. doi:10.1056/NEJMoa1911149
- 17. Slamon DJ et al. Overall survival (OS) results of the Phase III MONALEESA-3 trial of postmenopausal patients (pts) with hormone receptor-positive (HR+), human epidermal growth factor 2-negative (HER2-) advanced breast cancer (ABC) treated with fulvestrant (FUL) ± ribociclib (RIB). LBA7_PR. Presented at the European Society of Medical Oncology Congress, September 29, 2019. Barcelona, Spain.
- Slamon DJ et al. Updated overall survival (OS) results from the Phase III MONALEESA-3 trial of
 postmenopausal patients (pts) with HR+/HER2- advanced breast cancer (ABC) treated with fulvestrant (FUL) ±
 ribociclib (RIB). Presented at the American Society of Clinical Oncology Annual Meeting, June 5, 2021. Chicago,
 USA
- 19. Tripathy D et al. Updated overall survival (OS) results from the phase III MONALEESA-7 trial of pre- or perimenopausal patients with HR+/HER2- advanced breast cancer (ABC) treated with endocrine therapy (ET) ± ribociclib. Presented at the San Antonio Breast Cancer Symposium, December 9, 2020. Texas, USA.
- 20. Yardley D et al. Overall survival (OS) in patients (pts) with advanced breast cancer (ABC) with visceral metastases (mets), including those with liver mets, treated with ribociclib (RIB) plus endocrine therapy (ET) in the MONALEESA (ML) -3 and -7 trials. Presented at the American Society of Clinical Oncology Annual Meeting, June 2020. Chicago, USA.
- 21. O'Shaughnessy J et al. Overall survival subgroup analysis by metastatic site from the Phase III MONALEESA-2 study of first-line ribociclib + letrozole in postmenopausal patients with HR+/HER2- advanced breast cancer. Presented at the San Antonio Breast Cancer Symposium, December 7-10, 2021. Texas, USA.
- European Society of Medical Oncology (ESMO). ESMO MCBS scorecards; NATALEE. Accessed December 2024. https://www.esmo.org/guidelines/esmo-mcbs/esmo-mcbs-for-solid-tumours/esmo-mcbs-scorecard-468-1
- 23. European Society for Medical Oncology. Magnitude of Clinical Benefit Scale Scorecard. Accessed December 2024. https://www.esmo.org/guidelines/esmo-mcbs/esmo-mcbs-scorecards/scorecard-158-1
- 24. European Society for Medical Oncology. Magnitude of Clinical Benefit Scale Scorecard. Accessed December 2024. https://www.esmo.org/guidelines/esmo-mcbs/esmo-mcbs-scorecards/scorecard-9-1

###

Novartis Media Relations

E-mail: media.relations@novartis.com

Central North America

Anja von Treskow +41 79 392 9697 Michael Meo +1 862 274 5414

Anna Schäfers +41 79 801 7267

Switzerland

Satoshi Sugimoto +41 79 619 2035

Novartis Investor Relations

Central investor relations line: +41 61 324 7944

E-mail: investor.relations@novartis.com

Central North America
Isabella Zinck +41 61 324 7188 Sloan Simpson

Nicole Zinsli-Somm +41 61 324 3809 Jonathan Graham +1 201 602 9921 Imke Kappes +41 61 324 8269 Parag Mahanti +1 973 876 4912

+1 862 345 4440