MEDIA & INVESTOR RELEASE

Novartis Kisqali® prolonged PFS benefit for pre- and perimenopausal patients with aggressive HR+/HER2− metastatic breast cancer compared to chemotherapy

- **RIGHT Choice Phase II trial is the first randomized study in patients with aggressive HR+/HER2− metastatic breast cancer (MBC), including visceral crisis, comparing a CDK4/6 inhibitor (CDK4/6i) plus endocrine therapy (ET) versus combination chemotherapy (CT).**

- **Kisqali plus ET demonstrated a statistically significant progression-free survival (PFS) benefit of one year compared to combination CT; data to be presented at SABCS 2022.**

- **Kisqali is a unique CDK4/6i that has consistently shown statistically significant overall survival benefit while preserving or improving quality of life across three Phase III trials in MBC, including in patients with aggressive disease.**

**Basel, December 6, 2022** — Novartis today announced results from the RIGHT Choice Phase II trial evaluating Kisqali® (ribociclib) plus endocrine therapy (ET) against combination chemotherapy (CT) in the first-line setting for pre- and perimenopausal patients with aggressive forms of hormone receptor-positive, human epidermal growth factor receptor-2 negative (HR+/HER2−) metastatic breast cancer (MBC), including patients with visceral crisis. CT has remained the preferred option for patients with rapidly progressing disease and visceral crisis, despite the widespread adoption of CDK4/6 inhibitors (CDK4/6i) plus ET as first-line treatment for HR+/HER2− MBC. Kisqali demonstrated a nearly one-year progression-free survival (PFS) benefit in the study, supporting the superiority of Kisqali plus ET for this hard-to-treat patient population. RIGHT Choice is the first randomized study comparing a CDK4/6i plus ET vs. combination CT in aggressive HR+/HER2− MBC; data from this open-label, multi-national trial will be presented as a late-breaker oral presentation at the 2022 San Antonio Breast Cancer Symposium (SABCS) and included in the SABCS press program.

“Younger patients with aggressive disease often show resistance to treatment, resulting in worse prognoses – so it is encouraging to see RIGHT Choice data demonstrating a significant one-year benefit for this patient population when using ribociclib plus endocrine therapy compared to combination chemotherapy. Patients on the ribociclib arm had also lower rates of adverse events, such as diarrhea and fatigue, compared to chemotherapy, which could potentially impact quality of life,” said Dr. Yen-Shen Lu, Division Chief of Medical Oncology at Department of Oncology, National Taiwan University Hospital. “With these improvements in outcomes and tolerability, oncologists should consider ribociclib plus ET as a treatment option for patients with aggressive forms of HR+/HER2− MBC, including patients with visceral crisis.”

The study enrolled 222 patients with aggressive forms of HR+/HER2− MBC (i.e., with symptomatic visceral metastases, rapid disease progression or markedly symptomatic non-visceral metastases), including more than 50% of patients with visceral crisis as determined.
by investigators; Kisqali plus ET doubled the median PFS vs. combination CT at 24.0 months compared to 12.3 months (HR=0.54; 95% CI: 0.36-0.79; p=.0007) in the first-line setting. Median time to treatment failure with Kisqali plus ET was 18.6 months compared to 8.5 months with combination CT (HR=0.45; 95% CI: 0.32-0.63). Furthermore, patients in the Kisqali plus ET arm of the trial reported lower rates of treatment-related serious adverse events (AEs) and lower rates of discontinuation due to treatment-related AEs, compared to patients in the combination CT trial arm. Overall, the Kisqali safety profile was consistent with previously reported data1.

“Kisqali is a unique CDK4/6 inhibitor with the most robust evidence demonstrating overall survival and quality of life benefits for a wide spectrum of patients, including those with aggressive disease,” said Jeff Legos, Executive Vice President, Global Head of Oncology and Hematology at Novartis. “RIGHT Choice adds to the breadth of data that supports Kisqali as the first-line treatment of choice for patients with MBC, including those with visceral crisis.”

**About Kisqali® (ribociclib)**
Kisqali is the only CDK4/6 inhibitor with proven overall survival benefit across all three pivotal Phase III advanced breast cancer trials2-13 and is recognized by the National Comprehensive Cancer Network (NCCN) guidelines as the only CDK4/6i with overall survival benefit in first-line HR+/HER2- advanced breast cancer14. Additionally, Kisqali has the highest rating of any CDK4/6i on the ESMO Magnitude of Clinical Benefit Scale, achieving a score of five out of five for first-line premenopausal patients with HR+/HER2- advanced breast cancer15. Further, Kisqali in combination with either letrozole or fulvestrant has uniquely, among other CDK4/6i, received a score of four out of five for postmenopausal patients with HR+/HER2- advanced breast cancer treated in the first line16.

Kisqali has been approved in more than 95 countries worldwide, including by the United States Food and Drug Administration (FDA) and the European Commission, for the treatment of women with HR+/HER2- advanced or metastatic breast cancer in combination either with an aromatase inhibitor or with fulvestrant as initial endocrine-based therapy or following disease progression on endocrine therapy. Kisqali in combination with fulvestrant is approved as initial endocrine-based therapy or following disease progression on endocrine therapy in men by the FDA17.

Novartis is committed to continuing to study Kisqali in breast cancer. NATALEE is a large Phase III clinical trial of Kisqali plus endocrine therapy in the adjuvant treatment of HR+/HER2- early breast cancer being conducted in collaboration with Translational Research In Oncology (TRIO)18. Additionally, Novartis is collaborating with SOLTI, who is leading HARMONIA, to test whether Kisqali changes tumor biology to enable a better response to endocrine-based therapy compared to ibrance® for patients with advanced HR+/HER2-, HER2-enriched subtype19, and with the Akershus University Hospital in Norway on the NEOLETRIB trial, a neoadjuvant Phase II trial studying the effects of Kisqali in HR+/HER2- early breast cancer to discover the potentially unique underlying mechanism of action20.

Kisqali was developed by the Novartis Institutes for BioMedical Research (NIBR) under a research collaboration with Astex Pharmaceuticals.


**About Novartis in Advanced Breast Cancer**
Novartis tackles breast cancer with superior science, collaboration and a passion for transforming patient care. We’ve taken a bold approach to our research by including patient populations often neglected in clinical trials, identifying new pathways or mutations that may play a role in disease progression and developing therapies that not only maintain, but also improve, quality of life for patients. Our priority over the past 30 years and today is to deliver treatments proven to improve and extend lives for those diagnosed with metastatic breast cancer.
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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
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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.
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About Novartis
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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
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endocrine therapy vs physician’s choice combination chemotherapy. Presented at the 2022 San Antonio
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advanced breast cancer (ABC) and visceral metastases (mets) treated with ribociclib (RIB) + endocrine
therapy (ET) in the MONALEESA (ML) trials. Presented at the European Society of Medical Oncology
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17. Kisqali (ribociclib) Prescribing Information. East Hanover, New Jersey, USA: Novartis Pharmaceuticals Corporation.


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