

MEDIA UPDATE

Novartis announces collaboration on HARMONIA, a Phase III, head-to-head trial evaluating Kisqali® vs. Ibrance®* in patients with HR+/HER2- advanced breast cancer

- *HARMONIA seeks to identify the best therapeutic option between Kisqali and Ibrance® for patients with aggressive HER2-enriched intrinsic subtype of HR+/HER2- advanced breast cancer (ABC)*
- *HARMONIA is intended to test whether Kisqali changes tumor biology to enable a better response to endocrine-based therapy even within the more aggressive subtypes, improving the course of HR+/HER2- disease*
- *Kisqali is unique as the only CDK4/6 inhibitor with proven overall survival benefit in all three pivotal trials, with consistent outcomes across different patient subgroups²⁻⁴*
- *SOLTI Innovative Cancer Research (SOLTI) is leading HARMONIA in collaboration with Novartis and Alliance Foundation Trials (AFT), conducting it across 80 hospitals in Spain, Portugal and the United States*

Basel, September 19, 2021 — Novartis today announced a collaboration with SOLTI Innovative Cancer Research (SOLTI) on HARMONIA, an international, randomized, Phase III, multicenter, open-label study of Kisqali® (ribociclib) versus Ibrance® (palbociclib), both in combination with endocrine therapy, in patients with hormone receptor-positive, human epidermal growth factor receptor 2-negative (HR+/HER2-) advanced or metastatic breast cancer with a HER2-enriched (HER2E) intrinsic subtype. HARMONIA is the first prospective Phase III trial to enroll patients selected by RNA-based molecular subtyping of their tumors and the first to directly compare two CDK4/6 inhibitors in patients with HR+/HER2- advanced breast cancer.

“The strength and consistency of the Kisqali overall survival data across the MONALEESA program reinforce there are differences among CDK4/6 inhibitors, and that Kisqali stands apart in its ability to help patients achieve their goal of more quality time,” said Susanne Schaffert, PhD, President, Novartis Oncology. “HARMONIA, a novel head-to-head trial, is a testament to our bold development approach and will provide evidence on the unique profile of Kisqali and its unmatched benefit for HR+/HER2- advanced breast cancer patients. We are grateful to be collaborating on this important study with leading academic research groups.”

The primary endpoint of HARMONIA is progression free survival (PFS), and the study will evaluate if Kisqali positively alters tumor biology, enabling a better response to endocrine therapy compared to Ibrance®.

“HARMONIA will significantly advance clinical and translational knowledge to optimize the diagnosis and treatment of patients with advanced breast cancer,” said Aleix Prat, SOLTI President, Head of the Medical Oncology Department at Hospital Clínic of Barcelona, Head of the Translational Genomics Group and Targeted Therapies in Solid Tumors at IDIBAPS and Professor of Medicine at the University of Barcelona. “As an experienced academic research group in the field of oncology, we are proud to be pioneering this first-of-a-kind research on breast cancer at the RNA level to recognize the value of intrinsic subtypes, which impact patient outcomes in terms of incidence, survival and response to treatment.”

HARMONIA enrollment is expected to begin in Q1 2022. Patients with the basal-like subtype may also enroll. This exploratory cohort of patients will be treated with a chemotherapy-based regimen as these tumors behave more like triple-negative breast cancer.

About Kisqali® (ribociclib)

Kisqali is the CDK4/6 inhibitor with the largest body of clinical trial evidence demonstrating consistent and superior overall survival benefit compared to endocrine therapy alone. Overall survival results were presented previously: MONALEESA-7 (ASCO 2019) and MONALEESA-3 (ESMO 2019) and MONALEESA-2 (ESMO 2021); MONALEESA-7 and MONALEESA-3 were published in the *New England Journal of Medicine*, with updated exploratory analyses presented at SABCS 2020 and ASCO 2021, demonstrating Kisqali plus endocrine therapy significantly extends life in pre/perimenopausal or postmenopausal women with HR+/HER2- advanced breast cancer^{2-4, 10-11}.

Kisqali is approved by the US Food and Drug Administration (FDA) and by the European Commission (EC) as initial endocrine-based therapy for postmenopausal women with HR+/HER2- locally advanced or metastatic breast cancer in combination with an aromatase inhibitor. Kisqali in combination with an aromatase inhibitor is approved for the treatment of pre-, peri- or postmenopausal women as initial endocrine-based therapy, and also indicated for use in combination with fulvestrant as both first- or second-line therapy in postmenopausal women by the FDA and by the EC¹². Kisqali is approved in over 95 countries¹.

Novartis is continuing to reimagine cancer with an additional trial of Kisqali. NATALEE is a large confirmatory clinical trial of Kisqali with endocrine therapy in the adjuvant treatment of HR+/HER2- early breast cancer being conducted in collaboration with Translational Research In Oncology (TRIO)¹³.

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 advanced breast cancer.

Important Safety Information from the Kisqali EU SmPC

Kisqali® (ribociclib) is a prescription medicine approved in combination with an aromatase inhibitor as initial endocrine - based therapy in women with hormone receptor (HR)-positive, human epidermal growth factor receptor 2 (HER2)-negative advanced or metastatic breast

cancer or fulvestrant as initial endocrine - based therapy or following disease progression on endocrine therapy in postmenopausal women with hormone receptor (HR)-positive, human epidermal growth factor receptor 2 (HER2)-negative advanced or metastatic breast cancer. It is not known if Kisqali is safe and effective in children or adolescents. Kisqali can cause a heart problem known as QT prolongation. This condition can cause an abnormal heartbeat and may lead to death. Kisqali is not indicated for concomitant use with tamoxifen due to an increased risk of QT prolongation. Patients should tell their health care provider right away if they have a change in their heartbeat (a fast or irregular heartbeat), or if they feel dizzy or faint. Kisqali can cause serious liver problems. Patients should tell their health care provider right away if they get any of the following signs and symptoms of liver problems: yellowing of the skin or the whites of the eyes (jaundice), dark or brown (tea-colored) urine, feeling very tired, loss of appetite, pain on the upper right side of the stomach area (abdomen), and bleeding or bruising more easily than normal. Low white blood cell counts are very common when taking Kisqali and may result in infections that may be severe. Patients should tell their health care provider right away if they have signs and symptoms of low white blood cell counts or infections such as fever and chills. Before taking Kisqali, patients should tell their health care provider if they are pregnant, or plan to become pregnant as Kisqali can harm an unborn baby. Females who are able to become pregnant and who take Kisqali should use highly effective birth control during treatment and for at least 3 weeks after the last dose of Kisqali. Do not breastfeed during treatment with Kisqali and for at least 3 weeks after the last dose of Kisqali. Patients should tell their health care provider about all of the medicines they take, including prescription and over-the-counter medicines, vitamins, and herbal supplements since they may interact with Kisqali. Patients should avoid grapefruit or grapefruit juice while taking Kisqali. The most common side effects (incidence $\geq 20\%$) include infections, white blood cell count decreases, headache, cough, nausea, tiredness, diarrhea, vomiting, constipation, hair loss and rash. The most common Grade 3/4 side effects (incidence $>5\%$) were infections, low neutrophils, low leukocytes, low red blood cells, abnormal liver function tests, low lymphocytes, low phosphate levels and vomiting. Abnormalities were observed in hematology and clinical chemistry laboratory tests.

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

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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 109,000 people of more than 140 nationalities work at Novartis around the world. Find out more at <https://www.novartis.com>.

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*Ibrance® is a registered trademark of Pfizer Inc.

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