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MEDIA UPDATE

Novartis Kisqali® receives the highest rating of any CDK4/6 inhibitor on the ESMO Magnitude of Clinical Benefit Scale

- *Kisqali is the only CDK4/6 inhibitor, in combination with endocrine therapy, to achieve a perfect 5 out of 5 score – confirming substantial benefit for premenopausal women with HR+/HER2- advanced breast cancer (aBC), based on significant overall survival (OS) benefit and improved quality of life, in the MONALEESA-7 study*[1]

- *Kisqali is also the only CDK4/6 inhibitor to receive a score of 4 out of 5 for first-line postmenopausal women with HR+/HER2- aBC based on the OS benefit and maintained quality of life observed in MONALEESA-3*[2]

- *New data at ESMO Virtual Congress 2020 add to the substantial body of evidence further differentiating Kisqali as the only CDK 4/6 inhibitor that significantly improves OS in two phase III trials, with consistent results across patient subgroups, and with quality of life benefits*

Basel, September 21, 2020 — Novartis proudly announces that Kisqali® (ribociclib) has achieved a score of five out of five on the European Society for Medical Oncology-Magnitude of Clinical Benefit Scale (ESMO-MCBS) for first-line premenopausal patients with hormone receptor positive, human epidermal growth factor receptor-2 negative (HR+/HER2-) advanced or metastatic breast cancer[1]. This perfect score was achieved as a result of the significant overall survival benefit and the quality of life improvements demonstrated by Kisqali plus endocrine therapy for premenopausal women in the Phase III MONALEESA-7 trial.

Kisqali also received an ESMO-MCBS score of four out of five, the highest score achieved by any CDK 4/6 inhibitor in combination with fulvestrant for first-line postmenopausal patients, based on the statistically significant overall survival benefit observed in the Phase III MONALEESA-3 study and maintained quality of life[2]. A score of four out of five was also granted for Kisqali plus fulvestrant in the second-line setting based on the MONALEEA-3 study.

Tested Agent(s)	Combined Agent(s)	Control Arm	Treatment Setting	Tumour Type	Tumour Sub-type	Tumour Sub-group	Tumour Stage	Score	Ref.	Score card
Ribociclib	Endocrine therapy	Placebo + endocrine therapy	1st line premenopausal HR+, HER2-	Breast Cancer	Breast Cancer	HR+ HER2-	Metastatic	5		→
Ribociclib	Fulvestrant	Placebo + fulvestrant	1st or 2nd line metastatic post-menopause ER/PR+	Breast Cancer	Breast Cancer	ER/PR+	Metastatic	4		→

Achieving a five on the ESMO-MCBS is the highest grade in the non-curative setting, and Kisqali received the highest scores across the board in advanced or metastatic breast cancer due to the body of evidence supporting the overall survival and quality of life benefits it provides. The ESMO-MCBS is a validated tool for physicians to assess the value of cancer treatments, and ultimately make informed treatment decisions for their patients.

Additionally, new Kisqali data will be presented during the ESMO Virtual Congress 2020 further build on the robust body of evidence. Key presentations include:

- An analysis that found Kisqali plus endocrine therapy demonstrated consistent improvement in overall survival in patients with endocrine-resistant HR+/HER2- advanced breast cancer, which is typically more challenging to treat. Treatment with Kisqali in patients with endocrine resistance led to a 30% and 41% reduction in the risk of death in the MONALEESA-3 and -7 studies over standard endocrine therapy, respectively. Safety was consistent with the overall study populations in both trials[4].
- An oral presentation of a robust pooled analysis of patient-reported outcomes from MONALEESA-2, -3, and -7 trials in first-line patients, which demonstrated improvement in quality of life for patients with HR+/HER2- advanced breast cancer upon receiving Kisqali plus endocrine therapy with consistency in different subgroups analyzed[5].
- A matching-adjusted indirect comparison (MAIC), a method used to estimate the comparative effectiveness of treatments after adjusting for differences in the patient populations where head-to-head trials do not exist, indicated that patients taking Kisqali plus fulvestrant as first-line therapy may live significantly longer than those taking palbociclib plus letrozole, based on the MONALEESA-3 and PALOMA-1 trials, respectively[6]. A trend toward improved progression free survival (PFS) for Kisqali plus fulvestrant versus palbociclib plus letrozole was also observed.

“The totality of these data presented at ESMO confirm the proven overall survival and quality of life benefits with Kisqali, reinforcing it as the standard of care for advanced breast cancer patients,” said Susanne Schaffert, PhD, President, Novartis Oncology. “We are proud to continue advancing the science across multiple breast cancer patient populations, including exploring the potential of Kisqali in early breast cancer.”

Visit https://www.virtualcongress.novartis.com/ESMO20 for the latest information from Novartis including our bold approach to reimagining cancer care, and access to our ESMO Virtual Congress 2020 symposia and data presentations (for registered participants).

About Kisqali® (ribociclib)
Kisqali is the CDK4/6 inhibitor with the largest body of first-line clinical trial evidence demonstrating consistent and sustained efficacy compared to endocrine therapy alone. Overall survival results from MONALEESA-7 and MONALEESA-3 were presented at ASCO 2019 and ESMO 2019 respectively, demonstrating Kisqali plus endocrine therapy significantly extends life in pre/perimenopausal or postmenopausal women with HR+/HER2- advanced breast cancer. Overall survival follow-up is ongoing for the Phase III MONALEESA-2 trial.

Kisqali was initially approved by the US Food and Drug Administration (FDA) in March 2017 and by the European Commission (EC) in August 2017, as initial endocrine-based therapy for postmenopausal women with HR+/HER2- locally advanced or metastatic breast cancer in combination with an aromatase inhibitor based on findings from the pivotal MONALEESA-2 trial. Kisqali in combination with an aromatase inhibitor was 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 in July 2018 and by the EC in December 2018. Regulatory filings are underway with other health authorities worldwide.

Novartis is continuing to reimagine cancer by investigating Kisqali in early breast cancer. The NATALEE study is a Phase III 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).

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 >=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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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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5. Fasching PA, Bardia A, Nusch A, et al. Pooled Analysis of Patient-reported Quality of Life in the MONALEESA-2, -3, and -7 Trials of Ribociclib Plus Endocrine Therapy to Treat Hormone Receptor–positive, HER2-Negative Advanced Breast Cancer. Presented at the European Society for Medical Oncology (ESMO) Virtual Congress, September 19-21, 2020, (Abstract #276O).

6. Fasching PA, Delea TE, Lu Y, et al. Comparative Effectiveness of Ribociclib Plus Fulvestrant Versus Palbociclib Plus Letrozole as First-line Treatment of HR+/HER2− Advanced Breast Cancer Assessed by Matching-adjusted Indirect Comparison. Presented at the European Society for Medical Oncology (ESMO) Virtual Congress, September 19-21, 2020, (Abstract #330P)

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