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FDA Approves Perjeta (Pertuzumab) for People With HER2-Positive Metastatic Breast Cancer

New Personalized Medicine Gave People With Aggressive Form of Breast Cancer More Time Without Their Disease Worsening

South San Francisco, Calif. -- June 8, 2012 -- Genentech, a member of the Roche Group (SIX: RO, ROG; OTCQX: RHHBY), today announced that the U.S. Food and Drug Administration (FDA) has approved Perjeta™ (pertuzumab). Perjeta is approved in combination with Herceptin® (trastuzumab) and docetaxel chemotherapy for the treatment of people with HER2-positive metastatic breast cancer (mBC) who have not received prior anti-HER2 therapy or chemotherapy for metastatic disease. This approval is based on data from a Phase III study which showed that people with previously untreated HER2-positive mBC who received the combination of Perjeta, Herceptin and docetaxel chemotherapy lived a median of 6.1 months longer without their cancer getting worse (progression-free survival, or PFS) compared to Herceptin plus docetaxel chemotherapy (median PFS 18.5 vs. 12.4 months).

The combination of Perjeta, Herceptin and chemotherapy is the only regimen to have shown a significant improvement in PFS compared to Herceptin plus chemotherapy in people with previously untreated HER2-positive mBC.

Perjeta is a personalized medicine that targets the HER2 receptor, a protein found in high quantities on the outside of cells in HER2-positive cancers. Perjeta is believed to work in a way that is complementary to Herceptin, as the two medicines target different regions on the HER2 receptor.

"Today's approval of Perjeta is an important advance in the treatment of HER2-positive metastatic breast cancer," said Hal Barron, M.D., chief medical officer and head, Global Product Development. "Perjeta attacks HER2-positive tumors differently than Herceptin. Based on the way the two medicines work together, the combination plus chemotherapy can prolong the time before this aggressive cancer worsens compared to Herceptin and chemotherapy alone. We are very pleased to see our efforts in studying the science of HER2 translate into another personalized medicine."

With the approval, Genentech has agreed to post-marketing commitments related to the manufacturing process for Perjeta. These include FDA review of data from the next several productions of the medicine.

"We expect to meet demand for Perjeta following today's FDA approval. We recently identified a cell growth issue that might affect our future supply of the medicine," said Patrick Y. Yang, Ph.D., head, Pharma Global Technical Operations. "We take this very seriously and are working with the FDA to ensure a consistent manufacturing process that maintains drug supply for the people who need it."

Perjeta will be available to people in the United States within two weeks. Genentech is committed to helping people who need Perjeta. Genentech Access Solutions is available to provide doctors and patients coverage and reimbursement support, patient assistance and information resources. Doctors can contact Genentech Access Solutions at http://www.GenentechAccessSolutions.com or

Roche has also submitted a Marketing Authorization Application to the European Medicines Agency (EMA) for Perjeta in combination with Herceptin and docetaxel chemotherapy for the treatment of previously untreated HER2-positive mBC or locally recurrent, unresectable (inoperable) breast cancer, in people who have not received previous treatment or whose disease has returned after treatment in the early-stage setting. This application is currently under review by the EMA.

Perjeta Efficacy in HER2-positive mBC

The FDA approval of Perjeta is based on results from CLEOPATRA (**CL**inical **E**valuation **O**f **P**ertuzumab **A**nd **TRA**stuzumab), an international, Phase III, randomized, double-blind, placebo-controlled study. The study evaluated the efficacy and safety profile of Perjeta combined with Herceptin and docetaxel chemotherapy compared to Herceptin and chemotherapy plus placebo in 808 people with previously untreated HER2-positive mBC or that had recurred after prior therapy in the adjuvant or neoadjuvant setting. The study showed people who received Perjeta in combination with Herceptin and chemotherapy experienced a 38 percent reduction in the risk of their disease worsening or death compared to people who received Herceptin and chemotherapy plus placebo (HR=0.62; p-value less than 0.0001, according to independent review). The study demonstrated a 6.1 month improvement in median PFS for people who received Perjeta compared to those who received Herceptin and chemotherapy plus placebo (median PFS 18.5 vs. 12.4 months).

In CLEOPATRA, the most common adverse reactions (rate greater than 30 percent) seen with Perjeta in combination with Herceptin and docetaxel were diarrhea, hair loss, low white blood cell count, nausea, fatigue, rash and peripheral neuropathy (numbness, tingling or burning sensation in the arms or legs). The most common Grade 3-4 adverse reactions (rate greater than 2 percent) were low white blood cell count, low white blood cell count with fever, decrease in a certain type of white blood cell, diarrhea, peripheral neuropathy, decrease in red blood cell count, weakness and fatigue.

About Perjeta (pronounced per JET uh); pertuzumab (pronounced per TOO zuh mab)

Perjeta is designed specifically to prevent the HER2 receptor from pairing (or "dimerizing") with other HER receptors (EGFR/HER1, HER3 and HER4) on the surface of cells, a process that is believed to play a role in tumor growth and survival. Binding of Perjeta to HER2 may also signal the body's immune system to destroy the cancer cells. The mechanisms of action of Perjeta and Herceptin are believed to complement each other, as both bind to the HER2 receptor, but to different regions. The combination of Perjeta, Herceptin and chemotherapy is thought to provide a more comprehensive blockade of HER signaling pathways.

Perjeta Indication Statement

Perjeta™ (pertuzumab) is approved for use along with trastuzumab and docetaxel (chemotherapy) in people with HER2-positive breast cancer that has spread to different parts of the body (metastatic) and who have not received anti-HER2 therapy or chemotherapy for metastatic breast cancer.

Important Safety Information

- Perjeta has been shown to work only in people with HER2-positive breast cancer. Patients must have a HER2 test to know if their breast cancer is HER2-positive before receiving an anti-HER2 treatment, such as Perjeta
- Because side effects from this treatment are common, it is important to know what side effects may happen and what symptoms patients should watch for
- A patient's doctor may stop treatment if serious side effects happen. Patients must contact their healthcare team right away if they have questions or are worried about any side effects

Serious Side Effect of Perjeta

Most Serious Side Effect: Receiving Perjeta during pregnancy can result in the death of an unborn baby and birth defects.

- Birth control should be used while receiving Perjeta and for six months after a

- If a patient is exposed to Perjeta during pregnancy, they are encouraged to enroll in the MotHER Pregnancy Registry by contacting 1-800-690-6720

Other Possible Side Effects

- **Heart problems:**

Perjeta can result in heart problems, including those without symptoms (such as reduced heart function) and those with symptoms (such as congestive heart failure). A patient's doctor may run tests to monitor the patient's heart function before and during treatment with Perjeta
Infusion-related reactions: Perjeta is a medicine that is delivered into a vein through a needle. This process can cause reactions known as infusion-related reactions. The most common infusion-related reactions when receiving Perjeta, trastuzumab, and docetaxel were fatigue, loss of taste, allergic reactions, muscle pain and vomiting

Severe allergic reactions: Some people receiving Perjeta may have severe allergic reactions, called hypersensitivity reactions or anaphylaxis. This reaction may be severe, may happen quickly, and may affect many areas of the body
Most Common Side Effects
The most common side effects of Perjeta when given with trastuzumab and docetaxel are diarrhea, hair loss, low levels of white blood cells with or without a fever, upset stomach, fatigue, rash and damage to the nerves (numbness, tingling, pain in hands/feet).

Patients are encouraged to report negative side effects of prescription drugs to the FDA. Visit http://www.fda.gov/medwatch, or call 1-800-FDA-1088.

Please see Perjeta full Prescribing Information including Most Serious Side Effect for additional Important Safety Information. For more information about Perjeta, visit http://www.perjeta.com.

About Herceptin

Herceptin is a personalized medicine designed to specifically block the HER2 protein on the surface of some cancer cells. Based on preclinical studies, this biologic antibody is believed to work by attaching to HER2 receptors to stop signals that

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