FDA Approves Talzenna for Advanced and Metastatic Breast Cancer

Talazoparib slowed disease progression compared to chemotherapy in EMBRACA study.

October 16, 2018 By Liz Highleyman

On October 16, the Food and Drug Administration (FDA) approved the PARP inhibitor Talzenna (talazoparib) for people with locally advanced or metastatic HER2 negative breast cancer who carry hereditary BRCA gene mutations. A recent clinical trial showed that Talzenna reduced disease progression by 46 percent compared with chemotherapy.

Women with certain inherited (also known as germline) BRCA mutations are at higher risk for breast and ovarian cancers. Around half of women who carry these deleterious mutations will develop breast cancer during their lifetime, according to the National Cancer Institute.

Breast cancer is classified by the kind of receptors it expresses. A majority of breast tumors carry hormone receptors for estrogen or progesterone and can be treated with hormone-blocking drugs. Other tumors express a receptor called HER2 (human epidermal growth factor receptor 2) and can be treated with HER2 inhibitors. Triple-negative breast cancer doesn't express any of these receptors and is harder to treat.

Talzenna, from Pfizer, was approved for the treatment of people with BRCA-mutated breast cancer that does not express HER2. The FDA approved a companion diagnostic test, called BRACAnalysis CDx, to help select eligible patients. The drug is approved for those with either locally advanced breast cancer or cancer that has spread elsewhere in the body, a process known as metastasis.

This targeted therapy works by blocking poly (ADP-ribose) polymerase, or PARP proteins, which play a role in DNA repair. Inhibiting PARP leads to more DNA breaks in cancer cells, which can halt cell division. People with BRCA mutations do not make proteins that fix this kind of DNA damage, so BRCA-related cancers are particularly susceptible to these drugs.

Talzenna is a once-daily capsule that can be taken with or without food. Treatment should continue until disease progression occurs or a patient experiences unacceptable side effects. Patients are not required to have tried other treatments first.

Another PARP inhibitor, Lynparza (olaparib), was approved in January in for people with advanced or metastatic breast cancer who were previously treated with chemotherapy. Lynparza and two

other similar drugs, Rubraca (rucaparib) and Zejula (niraparib), are also approved for advanced or recurrent ovarian cancer.

The new approval was supported by data from the Phase III EMBRACA trial, which compared Talzenna against various chemotherapy drugs in more than 400 people with BRCA-mutated, HER2 negative locally advanced or metastatic breast cancer.

As reported at last year's San Antonio Breast Cancer Symposium, the median duration of progression-free survival, meaning patients were still alive with no worsening of disease, was 8.6 months in the Talzenna group compared with 5.6 months in the chemotherapy group—a 46 percent lower likelihood of disease progression. The overall response rate, meaning complete or partial tumor shrinkage, was 63 percent in the Talzenna group compared with 27 percent in the chemotherapy group. Full results were published in the New England Journal of Medicine in August.

Side effects were common, with about 30 percent of women in both treatment groups reporting serious adverse events. The most common adverse events in people taking Talzenna were fatigue, headache, nausea, vomiting, diarrhea, decreased appetite, hair loss and blood cell deficiencies. Talzenna can cause depletion of red blood cells (anemia), white blood cells (neutropenia) and platelets (thrombocytopenia), which can lead to infections and easy bleeding. The Talzenna label includes a warning about myelodysplastic syndrome or acute myeloid leukemia, which occurred in a very small number (0.3 percent) of people who took the drug in clinical studies.

Despite its side effects, the EMBRACA researchers looked at patient-reported quality-of-life measures and found that women treated with Talzenna reported a substantially longer time until deterioration of their health status.

Click here for full prescribing information for Talzenna.

Click here to learn more about BRCA mutations.
