FDA Puts Hold on Some Keytruda Studies

Trials of immunotherapy drug for multiple myeloma suspended after patient deaths.

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The Food and Drug Administration (FDA) this week put a clinical hold on three studies of Merck's immunotherapy blockbuster Keytruda (pembrolizumab) due to safety concerns, according to a company press release.

The trial suspension comes after an independent data and safety monitoring committee saw more deaths among patients taking Keytruda as part of combination therapy for multiple myeloma, a type of blood cancer, in two clinical trials.

Keytruda is a monoclonal antibody that blocks the PD-1 receptor (an immune "checkpoint") on T-cells, the main soldiers of the immune system. PD-1 plays a role in regulating immune function. Some tumors can hijack PD-1 to turn off immune responses against them. Drugs that block PD-1 can release the brakes and restore T-cell activity against cancerous cells. Studies have shown that Keytruda improves survival in people with a variety of cancers, including lung cancer, bladder cancer, melanoma and triple-negative breast cancer.

The major safety concern with checkpoint inhibitors like Keytruda is immune-related adverse events. These drugs are designed to work by restoring immune responses against cancer cells, but they can also take the brakes off the immune system more broadly, leading to excessive inflammation of healthy tissue.

The clinical hold applies to two Phase III trials: Keynote-183, testing Keytruda in combination with Pomalyst (pomalidomide) and dexamethasone for treatment-experienced patients, and Keynote-185, testing Keytruda plus Revlimid (lenalidomide) and dexamethasone for patients being treated for the first time.

The FDA also put a partial hold on one cohort taking Keytruda plus lenalidomide and dexamethasone in the Phase I Keynote-023 study.

In June, Merck stopped enrolling new patients into Keynote-183 and Keynote-185. Now all participants in all three studies will stop taking Keytruda.

“The FDA has determined that the data available at the present time indicate that the risks of Keytruda plus pomalidomide or lenalidomide outweigh any potential benefit for patients with multiple myeloma,” Merck said in a press release.

However, the company said the clinical hold does not apply to the many other studies that are testing Keytruda alone or in combination therapy for more than 30 types of cancer.

To read a Merck press release about the trial hold, click here.
