Rucaparib shows clinical benefit in pancreatic cancer patients with BRCA mutation

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The targeted therapy rucaparib, which has demonstrated robust clinical activity in ovarian cancer patients with a BRCA mutation, also showed promise in previously treated pancreatic cancer patients with the mutation, according to results from a phase II clinical study presented by Susan M. Domchek, MD, executive director of the Basser Center for BRCA at the Abramson Cancer Center of the University of Pennsylvania, at the American Society of Clinical Oncology (ASCO) Annual Meeting. (Abstract # 4110)

Overall, a clinical benefit was observed in 32 percent of patients (6 of 19) treated with rucaparib. Of the 19 pancreatic patients, one had a complete response and two had partial responses, while four patients had stable disease. The objective response rate, the primary endpoint for the study, was 16 percent (3 of 19).

"These results are encouraging and further demonstrate the clinical significance of the BRCA cancer genes outside of breast and ovarian, and not just in women," Domchek said. "Importantly, it points us to a potential new treatment avenue for pancreatic cancer, an aggressive disease that's often caught in the later stages. Though smaller in number, some patients with advanced disease and carrying a BRCA mutation may benefit from the same targeted therapy being used today in the clinic to successfully treat some ovarian cancer patients."

Given the poor prognosis and limited treatment options in pancreatic cancer, new therapies to combat the disease are desperately needed: Earlier this year, the American Cancer Society reported that it is estimated that in 2016, nearly 42,000 people will die from the disease, surpassing the number of deaths from breast cancer by more than 1,000.

Recent studies have shown that rucaparib, a PARP inhibitor, effectively treats patients with platinum-sensitive, relapsed, high-grade ovarian cancer harboring a BRCA mutation. In a study presented at ASCO in 2015, researchers showed that treatment resulted in a 69 percent RECIST response rate in these patients. In April 2015, it received a U.S. Food and Drug Administration (FDA) Breakthrough Therapy designation. The FDA's designation, created in 2012, is intended to expedite the development and review of new medicines - both drugs and biologic agents - that treat serious or life-threatening conditions, if the therapy has demonstrated substantial improvement over available therapies.

The success in ovarian patients prompted a clinical study in pancreatic patients with the same mutation—about nine percent of pancreatic patients are BRCA1/BRCA2 positive.

The team enrolled participants with measurable, relapsed disease who received one to three prior rounds of chemotherapy for locally advanced or metastatic cancer. The trial included 11 male and eight female patients, with a median age of 57. Twenty-one percent of the patients tested positive for the BRCA1 mutation, while 79 percent tested positive for BRCA2.

The disease control rate (defined as partial response or stable disease for more than 12 weeks) for all patients was 32 percent (6 of the 19 patients) and 50 percent (three of six patients) in patients who received one prior line of chemotherapy. Four patients had stable disease, nine

patients had progressive disease, and three were not evaluable for response. One patient was on the drug for 72 weeks and is continuing to receive the drug. The drug had an acceptable safety profile. Common treatment-emergent side effects included nausea (63 percent) and anemia (47 percent).

All patients who responded received only one prior line of chemotherapy therapy, suggesting that the drug may be an option earlier in the treatment course.

More information: The results will be presented at the Gastrointestinal (Noncolorectal) Cancer poster session on Saturday, June 4 from 8 am to 11 am in Hall A.

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