Radiation therapy with pembrolizumab, bevacizumab safe for glioma patients

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Patients with recurrent high-grade glioma brain tumors have few effective treatment options and the majority of available therapies do not improve survival. Moffitt Cancer Center will present preliminary results from a phase 1 study testing whether the addition of pembrolizumab to radiation therapy and bevacizumab is safe and can control tumor growth for these patients. The findings will be discussed Saturday, June 4, during the American Society of Clinical Oncology Annual Meeting in Chicago.

The PD-1-targeting antibody pembrolizumab has shown activity in a variety of solid tumors and hematologic malignancies and is approved to treat non-small cell lung cancer and melanoma. Preclinical studies have shown that stereotactic radiosurgery combined with PD-1-targeting agents increases survival and produces durable responses in mouse models of glioma.

This phase 1 trial is designed to determine the recommended phase 2 dose, safety, tolerability and activity of pembrolizumab combined with hypofractionated stereotactic irradiation (HFSRT) and bevacizumab in patients with recurrent glioblastoma or anaplastic astrocytoma.

At the time the abstract was submitted, six patients were enrolled. Preliminary results suggest that the treatment regimen is safe, with no dose limiting toxicities or dose modifications observed. The most common treatment-related adverse event was grade 1 fatigue.

Pembrolizumab combined with HFSRT and bevacizumab produced durable disease control for 22 weeks or longer in three patients, with one patient achieving a complete response and two patients maintaining stable disease.

Solmaz Sahebjam, M.D., Director of Clinical Research Unit and assistant member of the Neuro-Oncology Department at Moffitt, will present the study results during the Saturday, June 4, central nervous system tumors poster session at 1 p.m. in Hall A at McCormick Place. Dr. Sahebjam has also been selected as a 2016 Conquer Cancer Foundation Career Development Award recipient.

Provided by H. Lee Moffitt Cancer Center & Research Institute