Abstracts

LTBK-01. UPDATES ON THE PHASE II AND RE-TREATMENT STUDY OF AZD6244 (SELUMETINIB) FOR CHILDREN WITH RECURRENT OR REFRACTORY PEDIATRIC LOW GRADE GLIOMA: A PEDIATRIC BRAIN TUMOR CONSORTIUM (PBTC) STUDY Jason R. Fangusaro¹, Arzu Onar-Thomas², Tina Young Poussaint³, Shengjie Wu², Azra H Ligon⁴, Neal Ian Lindeman⁴, Anuradha Banerjee⁵, Roger Packer⁶, Lindsay B. Kilburn⁶, Ian F. Pollack⁷, Ibrahim A. Qaddoumi², Paul Graham Fisher⁸, Girish Dhall⁹, Patricia Ann Baxter¹⁰, Susan G. Kreissman^{11,15}, L. Austin Doyle¹², Malcolm A. Smith¹², Maryam Fouladi¹³ and Ira J. Dunkel¹⁴; ¹Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, USA, ²St. Jude Children's Research Hospital, Memphis, TN, USA, ³Children's Hospital Boston, MA, USA, ⁴Brigham and Women's Hospital, Boston, MA, USA, ⁵University of California, San Francisco, San Francisco, CA, USA, ⁶Children's National Health System, Washington, DC, USA, ⁷Pittsburgh Children's Cancer Center, Baylor College of Medicine, Houston, TX, USA, ¹¹Duke University Medical Center, Durham, NC, USA, ¹²Cancer Therapy Evaluation Program, National Cancer Institute, Washington, DC, USA, ¹³Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA, ¹⁴Memorial Sloan Kettering Cancer Center, New York, NY, USA, ¹⁵Greenbaum Cancer Center, Baltimore, MD, USA

The PBTC is conducting a phase II study (NCT01089101) evaluating selumetinib (AZD6244, ARRY-142886), a MEK I/II inhibitor, in children with recurrent/refractory LGG assigned to 6 strata. We present the updated data on Stratum 2 and 5. Also, data on subsequent progression after treatment completion in patients enrolled on Stratum 1 and 3 will be discussed. Finally, we present details on the re-treatment study (PBTC-029C). Both stratum 2 (pilocytic astrocytoma [PA] without common BRAF aberrations) and Stratum 5 (non-pilocytic LGG with BRAF aberrations) met response criteria for expansion (> 2 objective responses in 16 patients), and accrual to a total of 25 patients on each stratum is ongoing. Among 50 patients treated on Stratum 1 (PA with BRAF aberrations) or Stratum 3 (NF-associated LGG), 21 have progressed. Thirteen of 21 have progressed after stopping therapy. The median time to progression for these 13 patients is 119 days (10-928). The re-treatment study has enrolled 25 patients who received a median of 12 re-treatment courses (2-36). The most common attributable toxicities after re-treatment were grade 1 CPK elevation (44%), diarrhea (44%), hypoalbuminemia (40%), elevated AST (36%), rash (36%) and fatigue (32%). The most common grade 3/4 attributable toxicities were grade 3 paronychia (8%), CPK elevation (4%), AST elevation (4%), decreased ejection fraction (4%), neutropenia (4%), elevated triglycerides (4%), peripheral neuropathy (4%) and grade 4 CPK elevation (4%). There is not a significant difference between the toxicities observed during original therapy versus re-treatment. The most current response and patient demographic data will be presented.

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