Genenta Phase I/II Glioblastoma Data at ASGCT Show Temferon™ Delivered Tumor-Focused Interferon Expression

May 14, 2021

Data presented at the 2021 American Society of Gene and Cell Therapy (ASGCT) Annual Meeting

MILAN (Italy) / NEW YORK (NY, USA) — Genenta Science, a clinical-stage biotechnology company pioneering the development of an investigational hematopoietic stem progenitor cell immuno-gene therapy for cancer (Temferon™), will present new clinical data from a Phase I/IIa study of Temferon in patients affected by glioblastoma multiforme (GBM) in an oral presentation at the 2021 American Society for Gene and Cell Therapy (ASGCT) Annual Meeting, taking place virtually on May 11-14, 2021.

The data presented at ASGCT are from Genenta's ongoing trial of Temferon in patients with GBM. The presentation focuses specifically on patients who have undergone a follow-up surgical procedure for their cancer. In addition to being a treatment option, follow-on surgery provides investigators with an opportunity to understand the impact of therapies at a cellular and molecular level.

The ASGCT presentation shows that genetic markers of Genenta's Temferon were detectable in tumor specimens from all four patients with progressive disease who underwent follow-on surgery. Furthermore, the expression of interferon- (IFN) responsive gene signatures in those tumors was increased compared with pre-treatment levels, which suggests that interferon-α (IFN-α) had been released locally in the tumor by cells derived from Genenta's investigational treatment.

Carlo Russo, Chief Medical Officer at Genenta Science, said: "These preliminary results provide exciting indications that Temferon acts in the way we anticipated even in the relatively inaccessible setting of glioblastoma multiforme. The data are encouraging and in line with our pre-clinical results, with early evidence that Temferon delivers biological effects that may impact the progression of individual lesions."

One of the four patients had two lesions removed at the second surgery; one was a prior lesion that had not been removed during the first surgery and was stable; the other was a relapsing progressing lesion that had developed at the first surgery site. Compared with the progressing tumor, the stable lesion displayed a higher proportion of T cells and Tie2 Expressing Monocytes (TEMs) within the myeloid infiltrate and had a higher IFN-response signature.

The data presented at ASGCT also supported the initial safety and tolerability profile of Temferon. Concentrations of IFN-α in the plasma and cerebrospinal fluid of patients remained low, while IFN-α responses were identified in myeloid cells that infiltrate tumors. Temferon-derived differentiated cells also persisted in peripheral blood and bone marrow for up to 18 months at lower levels, indicating the potential durability of the intervention. No dose limiting toxicities have been identified.

Presentation Details:

Title: Changes in the Tumor Microenvironment in Patients with Glioblastoma Multiforme Treated with IFN-a Immune Cell & Gene Therapy (TEM-GBM_001 Study)

Time: Friday May 14, 2021 at 1.30 PM Eastern Time (7.30 PM CET)

Presenting: Carlo Russo, CMO

To access the abstract please visit https://annualmeeting.asgct.org/