Title

ET-54IMMUNOTHERAPY BASED ON TUMOR TRANSPLANT ANTIGEN RECOGNITION EMERGES AS A PROMISING STRATEGY FOR RECURRENT GLIOBLASTOMA MULTIFORME (GBM) PATIENTS

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Authors

Schijns, Virgil
Pretto, Chrystel
Devillers, Laurent
et al.

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Abstracts

ET-54. IMMUNOTHERAPY BASED ON TUMOR TRANSPLANT ANTIGEN RECOGNITION EMERGES AS A PROMISING STRATEGY FOR RECURRENT GLIOBLASTOMA MULTIFORME (GBM) PATIENTS

Virgil Schijns[1,2], Chrystel Pretto[2], Laurent Devillers[2], Denis Pierre[2], Florence Hofman[3], Carol Kruse[4], Thomas Chen[2,3], Joachim Oertel[5], Peter Hantos[7], Daniela Bota[6], and Apostolos Stathopoulos[1]; [1]Wageningen University, Wageningen, The Netherlands; [2]Epitopoietic Research Corporation, Namur, Belgium; [3]University of Southern California, Los Angeles, CA, USA; [4]University of California, Los Angeles, Los Angeles, CA, USA; [5]Universitaetsklinikum des Saarlandes, Homburg, Germany; [6]University of California at Irvine, Irvine, CA, USA; [7]Arlon Hospital, Arlon, Belgium

Glioblastoma multiforme (GBM) prognosis remains very poor. This is especially true when the tumors relapse on the current standard of care treatments. Our preclinical data, generated in a rat CNS-1 glioma model in Lewis rats, provided the scientific rationale for a prototype clinical vaccine preparation, named ERC 1671 (Gliovac). ERC1671 is composed of autologous antigens, derived from the patient's own tumour tissue, and administered in conjunction with allogeneic antigens from histologically confirmed glioma tumours removed from other glioma patients. This new treatment was administered to recurrent, treatment resistant GBM patients, and compared to historic controls. 12 GBM patients with recurrent disease who recurred after standard of care treatment, including surgery followed by concomitant radiotherapy and chemotherapy with temozolomide, and for US patients, bevacizumab as second line treatment were treated under compassionate use/ hospital exemption protocols. ERC 1671 was given intra-dermally, every three days. Each injection was administered together with human granulocyte macrophage colony stimulating factor (Leukine®), and preceded by a regimen of regulatory T cell-depleting, low-dose cyclophosphamide. Our data suggest that ERC1671 administration in patients that have failed standard of care therapies enhances both progression-free survival (PFS) and overall survival (OS). Median OS for all 12 ERC1671 treated patients was 36 weeks versus 13 weeks in the historical control group ($p = 0.0076$). Patients with a higher KPS at tumour recurrence (>60) had a longer OS (43 weeks). Six-month survival for the 12 patients was 60% versus 20% in the historical control groups. Six-month survival for the 7 patients with KPS > 60 was 100%. Our first results suggest that ERC1671 has low toxicity and very promising efficacy. A phase II trial has recently been initiated in recurrent, bevacizumab naïve GBM patients (NCT00122681).