

UC Irvine

UC Irvine Previously Published Works

Title

RM-05CASE OF GLIOBLASTOMA PATIENT TREATED WITH NovoTTF THERAPY AT
RECURRENCE DEGENERATING TO SARCOMA

Permalink

<https://escholarship.org/uc/item/6521x4z4>

Journal

Neuro-Oncology, 16(suppl_5)

ISSN

1522-8517

Authors

Majd, Pejman
O'Connell, Daniel
Kim, Ronald
et al.

Publication Date

2014-11-01

DOI

10.1093/neuonc/nou273.5

Peer reviewed

Abstracts

RM-05. CASE OF GLIOBLASTOMA PATIENT TREATED WITH NovoTTF THERAPY AT RECURRENCE DEGENERATING TO SARCOMA

Pejman Majd¹, Daniel O'Connell¹, Ronald Kim¹, Daniela Bota^{1,2}, and Jose Carrillo^{1,2}; ¹University of California Irvine, Orange, CA, USA; ²NovoCure, Portsmouth, NH, USA

NovoTTF treatment is an FDA approved treatment strategy for recurrent Glioblastoma multiforme (GBM) management which employs alternating

electric fields to the region of the malignant tumor through probes on the patient's head which is thought to improve time to disease progression of GBM via cell cycle mitosis disruption. A patient is described with recurrent GBM who had disease progression following initial standard surgical treatment and concomitant chemo-radiotherapy and was found to have sarcomatous transformation after initiation of NovoTTF-100A electrical device therapy with bevacizumab. Upon tumor progression, less than two years after initial diagnosis, the patient underwent surgical resection which revealed transformation from a GFAP-positive WHO grade IV astrocytoma into a GFAP-negative, reticulin-positive sarcoma with rhabdomyoid features following histopathological evaluation. The possibility of a causal connection between the NovoTTF therapy and sarcomatous transformation needs to be further evaluated. No such case of sarcoma progression in the CNS following chemo-radiotherapy and/or electrical current treatment for Glioblastoma multiforme has been reported in the literature.