Article: 

Combined analysis of TERT, EGFR, and IDH status defines distinct prognostic glioblastoma classes

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September 23, 2014;83:1200-1206; published ahead of print August 22, 2014

Abstract

Full Text

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Data Supplement

Does TERTp mutation define a new category of glioblastoma?

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Labussiere et al. analyzed 395 glioblastoma (GB) patients for mutations in the promoter of the telomerase reverse transcriptase (TERTp) gene and determined survival based on the presence or absence of TERTp mutation. In addition, the authors correlated survival with amplification of the epidermal growth factor receptor (EGFR) and isocitrate dehydrogenase 1 (IDH1) mutation. [1]

This was a retrospective study with marked heterogeneity in treatment, age, and Karnofsky performance, which are all variables that influence survival. As a result, this study only serves to generate a hypothesis. Furthermore, many of the subset genotype categories defined by the authors were probably small (although no numbers of these categories were provided) given the comparatively low incidence of these gene alterations (e.g., IDH1 mutation is seen in less than 8% of all primary GB). [2-4]

Determining a new biomarker of clinical significance in GB as Labussiere et al. reported requires either a prospective or retrospective- prospective study. When defining biomarkers, it is also common to utilize both a training and validation set. While this study is thought provoking, their proposal of a new molecular classification of GB based on TERTp mutation, EGFR amplification, and IDH1 mutation is premature. [1,4]


For disclosures, please contact the editorial office at journal@neurology.org.

Published October 27, 2014