Reviewer's report

Title: Correlation between the progressive cytoplasmic expression of a novel small heat shock protein (Hsp16.2) and malignancy in brain tumors

Version: 1 Date: 22 August 2007

Reviewer: Lorenzo Lo Muzio

Reviewer's report:

General
The paper deals with an interesting issue the possible role of a novel small heat shock protein, Hsp16.2, in the diagnosis of neuroectodermal tumors. The authors investigated the expression of Hsp16.2 by immunohistochemistry and WB with a polyclonal antibody in different types of brain tumors and correlated its expression with the histological grade of the tumor.

Results suggest that Hsp16.2 expression is directly correlated with the histological grade of brain tumors and can be used as a possible tumor marker. These data seem to be very interesting. The manuscript is well-written and the methodologies used appear adequately performed.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

The size of sample is very limited; the authors examined only 51 cases of neuroectodermal tumours (3 schwannomas - grade 1, 4 pilocytic astrocytomas - grade 1, 3 meningotheial meningeomas - grade 1, 3 fibrous meningeomas - grade 1, 5 diffuse astrocytomas - grade 2, 3 oligodendrogliomas - grade 2, 2 ependymomas - grade 2, 3 atypical meningeomas - grade 2, 4 malignant meningeomas - grade 3, 4 anaplastic astrocytomas - grade 3, anaplastic oligodendroglomas - grade 3, 7 glioblastomas – grade 4, 4 medulloblastomas - grade 4 and 3 PNETs - grade 4. It is necessary to study a larger sample of specimens of each tumor type to obtain data significant.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

There are some typographical errors, such as oligodendroglioms at page 4.

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Discretionary Revisions (which the author can choose to ignore)
**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

'I declare that I have no competing interests'