Reviewer's report

Title: ADAR2 editing activity in newly diagnosed versus relapsed pediatric high-grade astrocytomas

Version: 3 Date: 7 October 2012

Reviewer: jacques grill

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MAJOR COMPULSORY REVISIONS

1) With respect to the role of RNA editing in pediatric astrocytomas, the authors do not bring new data to support the findings of the first version of their manuscript. If editing by ADAR2 plays a role in astrocytoma progression, similar loss of ADAR2 editing activity should be observed in recurrent low-grade glioma that are often operated more than once than it has been shown here in 4 patients with supratentorial high-grade gliomas. This would strengthen the statement of the authors. This does not mean as said in their answer to my comments to repeat another study on low-grade astrocytomas with or without relapse but analyse patients with matched samples at diagnosis and at relapse (a frequent case in low-grade astrocytomas).

2) regarding ADARB1/ADAR2 expression in pediatric high-grade gliomas, a quick look at http://hgserver1.amc.nl/cgi-bin/r2/main.cgi, the web tool compiling gene expression data in pediatric tumors, would tell the authors that ADAR2 expression is higher in grade II than in grade IV. However, there does not seem to exist a difference with respect to survival. These data merit to be discussed with respect to the results presented here.

MINOR ESSENTIAL REVISIONS

The paper from Ishiuchi in Nature Medicine 2002 does not state that editing events within GluR-B inhibit glioma cell migration in vivo. It shows that Ca(2+)-permeable AMPA receptors have crucial roles in growth of glioblastoma. The expression of these receptors were manipulated with adenoviruses constructs not editing. The sentence should be corrected in the introduction at page 4 line 13.

It may be worthwhile to have a look to adult data as well.

Level of interest: An article of limited interest

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
No competing interest.