Reviewer's report

Title: Specific Gene Expression Profiles and Unique Chromosomal Abnormalities are Associated with Regressing Tumors Among Infants with Dissiminated Neuroblastoma.

Version: 2 Date: 19 October 2008

Reviewer: Benedikt Brors

Reviewer's report:

The authors have only addressed one of my previous major points sufficiently and still need to consider the following remarks:

1. (Previous major point #1) The authors need to clearly state in the manuscript that their gene expression data is a particular subset from a dataset published previously (in Alaminos et al., Cancer Res. 2003, ref. #23). It is very well justified to have this separate subtype analysis together with new aCGH analyses, but it is also important to know how this study relates to prior publications. In addition, the authors need to provide public access to their data prior to publication, e.g. by citing an accession number from a public data repository (e.g. Arrayexpress or GEO). Description of the experiments should follow the MIAME standards (Nat Genet (2001) 29:365-371).

2. (Previous major point #2) The authors need to report for their findings some sort of significance measure that has been corrected for multiple testing. It might still be acceptable to present a screening study based on findings from uncorrected ("raw") statistics provided that data are appropriately validated afterwards (as the authors did partially by qRT-PCR). However, the corresponding FDR needs to be reported even if it's high, since it gives the reader important information with regard to the estimated number of false positives within the list. It makes a large difference whether the FDR is 30%, 50%, or 90%. It should be noted that it is possible to obtain a significant number of significant "raw" findings even from random data that have no real biological structure, just because of the multiplicity of the tests. Thus, a decent FDR will protect against these effects. (See, e.g., Storey & Tibshirani PNAS (2003) 100:9440-9445; Dupuy & Simon, J Natl Cancer Inst (2007) 99:147-157.) I recommend to omit the "step-down" procedure from the manuscript as the correction for FWER is probably way too conservative for a screening study (and the results aren't reported anyway). Furthermore, as all presented lists in the supplementary files are based on a cutoff of raw P value < 0.01, the two other thresholds in the "Methods" section (namely, 0.05 and 0.1) aren't needed and should be deleted to improve clarity.

3. In their response to my previous point #3, the authors provide a valuable discussion of their findings in relation to related studies by other groups. This discussion needs to be included, however, in the manuscript, too.
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.