Reviewer's report

Title: Derepression of Cancer/Testis Antigens in Cancer is Associated with Distinct Patterns of DNA Hypomethylation

Version: 2 Date: 5 March 2013

Reviewer: Wolfgang Schulz

Reviewer's report:

The manuscript has benefitted from the additional explanations and qualifications. In particular, the explanation of the PMP vector in the legend to Fig. 1 is lucid. Several points still need to be addressed

Major:

1) Specific examples of well-characterized CTAs or CTX need to be discussed, e.g. MAGE genes. Their PMP vectors could be shown in comparison to the prototypic vector and the particular PMP values given.

2) There is older literature on hypomethylation of CTAs that the authors do not seem to be aware of, especially from the Belgian group. It should be cited in the introduction. Please delete the unnecessary phrase "comes from a handful of directed experiments". A "global" analysis is certainly welcome, anyway.

Minor:

3) Please list the prototypic PMP vector explicitly in a (supplementary?) table.

4) Add another proviso in line 341: Furthermore, a single CpG site may not be representative of an entire promoter in all cases.

5) While the legend is very good, Fig.1 itself is still not self-explanatory. Please discuss possible improvements with colleagues not versed in bioinformatics. These are the readers that need to understand it.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.