Reviewer's report

Title: Small Interfering RNA Targeting Mcl-1 Enhances Proteasome Inhibitor-Induced Apoptosis in Solid Malignant Tumors

Version: 1 Date: 11 August 2011

Reviewer: martine amiot

Reviewer's report:

major revisions:
In this manuscript, the authors report that Bortezomib induces an up-regulation of Mcl-1 in colon and ovarian cell lines. The authors claim that Mcl-1 accumulation was caused by stabilization of the protein against degradation. However, the mechanism of stabilization has not been investigated while the E3 ligase (Mule) involved in Mcl-1 degradation is now well described. Thus, the authors should address the regulation of Mcl-1 ubiquitination and the regulation of the Mcl-1/Mule complexes. Overall, the data presented in cell lines are of good quality but not particularly novel.
The authors should also address in their manuscript whether Bortezomib induces Mcl-1 up-regulation in primary tumor cells.
The Mcl-1 siRNA has been only investigated in one colon cell line, therefore, it is highly recommended that the authors add data from other colon and ovarian cell lines.

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

Quality of written English: Acceptable

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