Reviewer's report

Title: Rho-kinase inhibitor HA-1077 suppresses the proliferation/migration and induces apoptosis of urothelial cancer cells

Version: 1  Date: 16 December 2013

Reviewer: Ivan Nabi

Reviewer's report:

This manuscript presents in vitro characterization of the anti-migratory and apoptotic role of a Rho Kinase inhibitor HA-1077. The objective of the paper was "to assess the value of the Rho/ROCK pathway as a molecular target for cancer therapy". However the Rho/ROCK pathway is well-established as a valid target for cancer therapy and a report using an alternate ROCK inhibitor (as compared to the established Y27632 inhibitor). The report proposes to further "to discuss the clinical potential of HA-1077 for use in targeted cancer therapy" but lacks in vivo experiments which would directly address this issue. Therefore while it is certainly interesting and important to assess whether this new ROCK inhibitor impacts urothelial cancer cell migration and cell death, the novelty of the study is limited to demonstration that ROCK inhibition prevents migration and induces apoptosis of urothelial cancer cell lines.

Additional points

1. It was not clear if in Figure 1 the authors study RhoA expression (Figure legend) or activation (text; figure).
2. The green background in Figure 2 was unnecessary.
3. The rationale for the treatment of cells with a combination of HA-1077, LPA and GGOH in the absence of treatments with the individual compounds alone is not clear.

Level of interest: An article of limited interest

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