Reviewer’s report

Title: Topical Rapamycin Inhibits Tuberous Sclerosis Tumor Growth in a Nude Mouse Model

Version: 1 Date: 30 November 2007

Reviewer: Thomas N Darling

Reviewer’s report:

This manuscript reports that topical rapamycin inhibits tumor growth in mice bearing TSC-related tumors. The study is novel and the results are interesting and informative.

The authors acknowledge limitations of their study, including the fact that tumors in this mouse model are subcutaneous (whereas TSC patient skin tumors are dermal), and that application of rapamycin away from the tumor was at least as effective as application directly over the tumor, suggesting that systemic levels account for the observed effect. Efforts are made to ensure that systemic levels of drug are due to absorption across the skin, but it appears that oral ingestion could still contribute to blood levels.

Major Compulsory Revisions
None

Minor Essential Revisions
None

Discretionary Revisions
In the second to last paragraph of the introduction, minor corrections in the descriptions of skin lesions could be made (e.g. it is the surface of the shagreen patch that resembles an orange peel, and periungual fibromas originate from below the proximal nail fold).

What next?: Accept after discretionary revisions

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.

Declaration of competing interests:
I declare that I have no competing interests.