Reviewer's report

Title: Kihi-to, a herbal traditional medicine, improves Abeta(25-35)-induced memory impairment and losses of neurites and synapses

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Reviewer: Shrinivas SK Kulkarni

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The present manuscript entitled “Kihi-to, a herbal traditional medicine, improves Abeta(25-35)-induced memory impairment and losses of neurites and synapses” by Tohda and colleagues is an attempt to underline the in-vivo and in-vitro effects of Kihi-to on memory, neurite growth and synapse reconstruction. Further, they have also extensively studied the mechanism behind the anti-dementia effect of Kihi-to.

Kihi-to is a natural medicine composed of twelve crude drugs. It is an already available medicine to be prescribed by medical practitioners in Japan. This research paper adds extensively to the existing literature of Kihi-to. Important part of this manuscript is that authors have tried to elucidate the possible mechanism of anti-dementia effect of it. They are suggesting that Kihi-to improved the memory impairment and losses of neurites and synapses possible by the calpain system inhibition. The extract has shown a clear cut ameliorative effect. As stated by the authors the targets molecules responsible for the biological action need to be further explored. Barring that the study is extensive in its nature and qualifies for publication.

The present manuscript is acceptable in its present form.