Reviewer's report

Title: Phytochemical profiling and in vitro screening for anticholinesterase, antioxidant, antiglucosidase and neuroprotective effect of three traditional medicinal plants for Alzheimer's Disease and Diabetes Mellitus dual therapy

Version: 1 Date: 13 Jul 2017

Reviewer: Ignea Codruta

Reviewer's report:
The manuscript by Penumala et al., describes investigation of anticholinesterase, antiglucosidase, antioxidant and neuroprotective activities of plant extracts from three traditional medical plants. Additionally, the authors present the phytochemical profiling of these plants. The outcomes of this study provide evidence of the potential biological activity of Buchanania axillaris, Hemidesmus indicus and Rhus mysorensis against AD and T2D, which could serve as a multifunctional treatment in dual therapy of AD and T2D.

Minor comments:

Abbreviation of AD and T2D should be avoided in the title. Full names followed by abbreviations should be provided when first time used in the manuscript, including the abstract. T2D abbreviation is not included in the final list. There are some minor formatting inconsistencies (e.g. remove line 152).
In lines 266-267: In the present study, several in vitro assays..., please mention which assays were conducted.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.
Yes
Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.
Yes

Are the conclusions drawn adequately supported by the data shown?
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