Reviewer's report

Title: Antihypertensive effect of Gentiana floribunda is mediated through Ca++ antagonism pathway

Version: 1 Date: 19 April 2012

Reviewer: Vidhu Pachauri

Reviewer's report:

The submitted manuscript “Antihypertensive effect of Gentiana floribunda is mediated through Ca++ antagonism pathway” describes a study that investigates the possible mechanism underlying traditional claims of anti-hypertensive activity of Gentiana floribunda. The study is an effort to pharmacologically justify and validate the anti-hypertensive activity claim of the traditional drug. Experimental design employs both in vivo and in vitro technique. The study follows a simple experimental design, is straightforward and executed well. The model used is although not advanced yet a standard established screening protocol. I recommend the manuscript to be accepted with major revisions.

Major Compulsory Revisions

Author must include the statistical marks for depicting comparison between different groups in all the test results. This is a critical flaw based on which (if not revised) the manuscript may be rejected.

Minor Essential Revisions

How did the authors decide or calculated that the extraction yield to be approximately 16.7%? Page #5; Line #7.

Please justify the title of the manuscript “Antihypertensive…” since author mainly concentrates on the vasodilatory effect in in vivo study protocol. In the in vivo study hypotension was observed in normotensive rats. Antihypertensive activity would be justified by B.P. lowering potential in a hypertensive animal.

Some of the relevant references that report the antihypertensive effects of the plant genus ‘Gentiana’ may have been included for example:


Discretionary Revisions

Firstly I appreciate that authors addressed an important aspect of pharmacological validation of traditional drugs. However, author overlooked a
very crucial point i.e. validation of the herbal extract. Today the major concern and limitation for acceptability of traditional medicine is validation and characterization of these natural extracts. In the present study author has performed qualitative characterization of Gentiana floribunda herbal extract. I suggest keeping one of its major chemical constituents as a standard author should have quantitatively validated the extract with some SD defined. Thus reporting a more scientifically accepted drug response relationship. Since the extraction procedure and basic herb variation itself may lead to large change in composition of extract making the present study less/ not reproducible at the said dose.

The present study despite old screening techniques is important also since not much information on the test compound is previously reported. The submitted manuscript will contribute to the little scientific evidence available on the plant extract.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.