Reviewer’s report

Title: The Selective Cytotoxic Anti Cancer Properties and Proteomic Analysis of Trigonella Foenum-Graecum

Version: 4 Date: 17 October 2013

Reviewer: Soundararajan Krishnaswamy

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Major Compulsory Revisions:
1. The second objective, the proteomic analysis of the fenugreek seeds, may not be very relevant to its anticancer properties unless the purpose of this part is sufficiently explained and related to anticancer function.

2. Fenugreek extract from 8 mg of seeds per day for the patient is hard to believe. It must be more. This must be clarified. Also, additional treatment measures, which the patient underwent, should be mentioned. Or if the information is not available that should be mentioned in limitations of the study.

3. It is mentioned that fenugreek seeds were extracted in water (Methods section). Clarify if it was just cold water. Ground seeds or whole seeds? Also, mention the amount of seeds used for extraction; how they were dried and reconstituted?

4. Different varieties of fenugreek need more description as to how they differ from each other.

5. Also, the goals of proteomic analysis of fenugreek varieties should be clarified; are you looking for peptides with anticancer activities? Are there previous reports on similar peptides?

6. Fenugreek proteomes analysis by 2D gel may be okey; however, what do the differently expressed proteins/peptides mean functionally? The reasoning that the different protein profiles may be the reason for their possible differences in medicinal properties is too speculative. To defend this section (the proteome part), you may have to introduce sufficient literature support, explaining how the proteome analysis by 2D gel can be useful in understanding the medicinal properties.

7. Also, cancer cell line specific anticancer activities of fenugreeked has been reported earlier; so, please give reasons for your work.

8. The limitations of this study (which are given below) are obvious and so should be discussed in detail:
   a. Very low amount of fenugreek used in treatment (6 mg per day) and the lack of information on other measures the patient may have been subjected to.
   b. How is the proteome analysis related to fenugreek’s anticancer properties?

Minor Essential Revisions:
1. Use uniform style (capitals and small letters) in key words section. 
2. Take care of numerous typos (many of them easy to spot). 
3. Paragraphs need proper alignment. 

**Level of interest:** An article of limited interest 

**Quality of written English:** Not suitable for publication unless extensively edited 

**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