Reviewer's report

Title: Chemical composition and antioxidant capacity of extracts from Podophyllum hexandrum Rhizome

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Reviewer: zenon jastrzebski

Reviewer's report:

Review of the manuscript entitled "Chemical composition and antioxidant capacity of extracts from Podophyllum hexandrum rhizome" by Mengfei Li et al.

General comments:

Podophyllum hexandrum is an important medicinal plant containing podophyllotoxin studied extensively for its antimitotic activity. The synthesis of podophyllotoxin analogues led to the discovery of new anticancer drugs currently used to treat a variety of malignancies. Therefore, the present manuscript dealing with biochemical composition and bioactivity of P. hexandrum extracts may be of particular importance to researchers interested in the topic of phytochemicals with tumoricidal activity. This plant is highly poisonous indicating its potential to be a rich source of highly bioactive agents that might be useful in treating abnormal cell growth or cancer.

The investigation was performed using appropriate and adequate methods that enabled to identify the major bioactive compounds present in the ethyl acetate and ethanol plant extracts and to prove their high antioxidant and radical scavenging activity. The protocol of the investigation is good and there are no doubts in the results obtained.

I recommend publishing the manuscript with minor essential revisions.

Specific comments:

Some inappropriate English expressions were found throughout the report like for example in the last sentence of the Conclusions. I would propose to write: "Based on the above data it can be concluded that P. hexandrum can be recommended as an alternative plant material of antioxidant and radical scavenging activity".

The title effectively communicates the contents and the major points; it does not contain extra words. However, I suggest changing the term "Chemical" to "Biochemical".

With respect

Prof. Zenon Jastrzebski
Warsaw, 8 November 2012.

Prof. Zenon Jastrzebski
Head of the Pharmacology Department
National Medicines Institute
Chelmska Str. 30/34
00-725 Warsaw
Poland

Declaration of competing interests:

I hereby declare that I have no competing interests.