Reviewer's report

Title: Identification of apoptosis promoting constituents of Ukr

Version: 1 Date: 31 October 2005

Reviewer: Vaqar Adhami

Reviewer's report:

General

This study investigates the apoptotic mechanism of Ukrain, a semisynthetic compound that consists of alkaloids isolated from Chelidonium majus L., of the family papaveracea. Besides, the study also identifies active constituents of the preparation termed "Ukrain". The study is significant in that it advances our knowledge on the mechanism of action of this compound. It is also significant since it identifies the "Ukrain-molecule" as being a mixture of known alkaloids and not a semi-synthetic molecule. Therefore, the compound Ukrain best qualifies as an "extract" rather than a drug or a molecule.

The paper is well written, with sound description of methodology and an adequate analysis of the results in the discussion section.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

While the paper focuses more on the mechanisms of apoptosis of Ukrain, the title suggests otherwise. Out of a total of 6 figures, only figure 3 is devoted to identification of constituents of Ukrain, the rest focus on apoptosis induction and the mechanism of apoptosis. Therefore, the title needs to reflect more on the findings rather than the purpose of the investigation.

There is complete lack of statistical analysis of the results. There is no indication as to how many times the experiments were repeated.

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

units for drug concentration in fig. 5d missing

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Discretionary Revisions (which the author can choose to ignore)

None

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field
Quality of written English: Acceptable

Statistical review: Yes

Declaration of competing interests:
I declare that I have no competing interests