Author's response to reviews

Title: Pro-apoptotic and anti-adhesive effects of four African plant extracts on the breast cancer cell line MCF-7

Authors:

Nadja Engel (nadja.engel-lutz@uni-rostock.de)
Abiodun Falodun (afalodun@olemiss.edu)
Udo Kragl (udo.kragl@uni-rostock.de)
Peter Langer (peter.langer@uni-rostock.de)
Juliane Kühn (juliane.kuehn@uni-rostock.de)
Johanna Barbara Nebe (barbara.nebe@med.uni-rostock.de)

Version: 6
Date: 18 August 2014

Author's response to reviews: see over
Author’s response to reviews

Title: Pro-apoptotic and anti-adhesive effects of four African plant extracts on the breast cancer cell line MCF-7

Authors:
Nadja Engel (nadja.engel-lutz@uni-rostock.de)
Abiodun Falodun (faloabi@uniben.edu)
Juliane Kühn (juliane.kuehn@uni-rostock.de)
Udo Kragl (udo.kragl@uni-rostock.de)
Peter Langer (peter.langer@uni-rostock.de)
J. Barbara Nebe (barbara.nebe@med.uni-rostock.de)

Version: 3 Date: 18 August 2014

Author’s response to reviews: see over
Reviewer's report (Referee 1)

Title: Pro-apoptotic and anti-adhesive effects of four African plant extracts on the breast cancer cell line MCF-7
Version: 5 Date: 6 August 2014
Reviewer: Heonyong Park

Reviewer's report:
No further questions

Level of interest: An article whose findings are important to those with closely related research interests
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.
Reviewer's report (Referee 3)

Title: Pro-apoptotic and anti-adhesive effects of four African plant extracts on the breast cancer cell line MCF-7

Version: 5
Date: 9 August 2014
Reviewer: Hsueh-Wei Chang

Reviewer's report:
Minor Essential Revisions

1. [Figure legend] Fig.1B: Please replace the “apoptosis” with “subG1 phase” in the legend and Y-axis of Figure 1B.
   Done.

2. [Fig. 2]: The double staining for annexin V/PI for “ZI” showed 15.8% (Q2 region) and 57.9% (Q3) in Fig. 2A in representative plot. Fig. 2B show the statistic results for ZI in 7.05±2.34 and 34.43±7.82 for Annexin V/PI (Q2) and PI alone (Q3). However, I cannot figure out the data. For example, the late apoptosis in Q2 did increases to 15.8% but the table in Fig2B showed 7.05±2.34. Please check the calculation again.
   Everything was checked and corrected.

3. [Results and Discussions-page 12]: “Surprisingly, only the treatment with 10 µg/ml ZI showed a moderate Annexin V labeling, as an indication of early apoptosis induction.”. Actually, the author show the ZI for Annexin V is 1.16% (Fig. 2B). I will suggest the authors to delete the description for the above sentence for “early apoptosis” but to mention the Annexin V/PI (late apoptosis) for ZI which is indeed highest in these compounds according to Fig. 2B.
   Done.

4. [Results and Discussions-page 12]: “PS, and especially JCP1 and JCP2 induced only late apoptotic or necrotic events, verified by high amounts of PI-positive cells.”. Except ZI, the other compounds show little positive for annexin V alone or Annexin V/PI (Fig. 2B), therefore, it is unsuitable to mention about the apoptosis, where the Annexin V (+)/PI(-) is early apoptosis and Annexin V (+)/PI(+) is late apoptosis. Therefore, I suggest to change this sentence as follows: “PS, and especially JCP1 and JCP2 induced only necrotic events, verified by high amounts of PI-positive cells.”
   Done.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable
**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
Reviewer's report (Referee 5)

Title: Pro-apoptotic and anti-adhesive effects of four African plant extracts on the breast cancer cell line MCF-7
Version: 5 Date: 10 August 2014
Reviewer: Fang-Rong Chang

Reviewer's report:

Major Compulsory Revisions
I just have a question on the extract production. The authors should have clear statement on it.
Did they use dry material? How long for the maceration at room temperature? Please confirm the % yield reaching to 51 for JCP2 just for one time maceration extraction. It means over 50% material dissolved in one extraction process.

Dried and powdered material was macerated for 72 h at room temperature 25 °C, and filtered. The sample was re-macerated and filtered. The combined filtrate was concentrated to dryness in vacuum to give 51 percent.
Please contact Prof. Falodun (faloabi@uniben.edu) for further detailed information or discussions about extract production and optimization.

Minor Essential Revisions
Nil

Discretionary Revisions
Nil

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.