Author's response to reviews

Title: Resveratrol protects leukemic cells against cytotoxicity induced by proteasome inhibitors via induction of FOXO1 and p27Kip1

Authors:

Xiao-Fang Niu (niuxiaofang521@126.com)
Bao-Qin Liu (baoqinliu@163.com)
Zhen-Xian Du (dzx_doctor@hotmail.com)
Hai-Yan Zhang (zhy_doctor@hotmail.com)
Yan-Yan Gao (angela_042214@163.com)
Ning Li (lining@hotmail.com)
Chao Li (lichao@hotmail.com)
Hua-Qin Wang (wanghq_doctor@hotmail.com)

Version: 3 Date: 20 January 2011

Author's response to reviews: see over
Dear Editor

Thank you for your comments concerning our manuscript. I am returning herewith the revised manuscript.

We greatly appreciate all of your help concerning improvements of our paper. We believe the manuscript revised according to the good suggestions of the reviewers has been improved satisfactorily. We hope you would be satisfactory with the current version and hope it will be acceptable for publication in BMC Cancer.

We seek your kind consideration of our revised manuscript. Thank you very much.

Hua-Qin Wang
China Medical University
Department of Biochemistry & Molecular Biology
Key Laboratory of Cell Biology, Ministry of Public Health
Key Laboratory of Medical Cell Biology, Ministry of Education,

Responses to Associate Editor's comments:

I would suggest to invite the authors for another careful revision in which they should address the remaining points of Dr. Mocali.

As suggested, we addressed the matter pointed out by Dr Mocali in the Result section and Discussion section (highlighted).

Beside this revision the authors need to improve their Ms in terms of statistics and data presentation. They mention in the figure legends that 'The results of a representative experiment are presented as mean ± standard deviation of the three independent samples. All experiments were repeated three times.' Rather than showing the mean ± SD of three replicate samples from one representative experiment (which reveals the variation of the test) the mean of the three independent experiments ± SD should be presented since the biological variability and not the technical variation of the test system is in this case the relevant information which should be provided.

As suggested, we changed the figure presentation in Figures (highlighted), we also changed the description in Material and Methods section as well as in Figure Legends (highlighted).
In addition and as also stated by Dr. Mocali, I would highly recommend that the manuscript is copyedited for word usage, spelling and grammar by a professional since the quality of the written English is sometimes really very poor.

**We apologized for our mistakes in previous manuscript. In the revised version, we corrected all the misses as possible as we could. Moreover, the manuscript has been carefully reviewed and revised by all the authors again.**

**Responses to the reviewers point by point**

**Reviewer: Professor Alessandra Mocali**

**Major Compulsory Revision**

1. I have no doubt about the protective effects of resveratrol after 24 h treatment. However I do not find acceptable citation of Chakraborty’s reference as “consistent” with these results, as it is evident also from the title: "Resveratrol induces apoptosis in K562 (chronic myelogenous leukemia) cells by targeting…..”, without any further discussion. At least I suggest to discuss the difference by sub-G1 fractions quantification and annexin V staining image. For instance, the use of 5 uM concentration of resveratrol in present work could be emphasized.

**As suggested, we changed description for Figure 1D in Results Section. In addition, we added some discussion in Discussion Section.**

**Minor essential revisions:**

1. I didn’t find, within the Discussion section, any sentence about the possibility of induction of cell differentiation by cell cycle blockage. Please, discuss this topic more extensively.

**As suggested, we added some description in the Discussion Section.**

2. In the legend to fig 2, the staining procedure for annexin V should be added to explain the type of FACS analysis carried out

**As suggested, we added the relative description in the revised version.**

3. In the text some mistakes are still present, e.g. pag 15: “resveratrol also compromised the apoptotic effects of other three structurally different proteasome” should be “proteasome inhibitors”

**We apologized for our mistakes in previous manuscript. In the revised version, we corrected all the misses as possible as we could. Moreover, the manuscript has been carefully reviewed and revised by all the authors again.**