Reviewer's report

Title: long non-coding RNA MEG3 inhibits NSCLC cells proliferation and induces apoptosis by affecting p53 expression

Version: 3 Date: 22 July 2013

Reviewer: Paolo Gandellini

Reviewer's report:

In the revised version of the manuscript, the authors addressed my request to show MEG3 expression levels in individual samples. However, they did not prove that correlations with pathological and clinical parameters, as shown in figure 1B,C,D, hold true also when MEG3 expression levels in tumors are used instead of tumor/normal ratios.

Minor essential revisions

1) The authors provided individual Delta Cts in supplementary table 1 (note that expression levels are missing for patient #44). My suggestion is to include the figure showing deltaCts in normal and tumors tissues that they showed in the rebuttal letter as panel of figure 1. The evidence that expression of MEG3 is differential in tumor compared to normal tissues both in case the data are expressed as absolute values as well as when they are expressed as ratios strengthens the authors’ findings. It is necessary however to provide also p-value of the difference between deltaCts in tumor and normal tissues in the graph.

2) The first figure provided in the rebuttal letter showing relative MEG3 expression in normal tissues and tumors is not clear. How these relative expression levels have been calculated from deltaCts?

3) Please show, at least in the rebuttal letter (but preferably in the main text), the correlations of MEG3 expression levels with pathological and clinical parameters, as shown in figure 1B,C,D, using deltaCts of tumor samples only.

4) Page 13: honestly I can’t understand the meaning of the sentence “The different expression level of MEG3 in NSCLC cell line may be due to the expression pattern of IncRNA is more cell specific and those cells ability to proliferate or migrate/invasive”. Please clarify.

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

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

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