Reviewer's report

Title: Endogenous melatonin and oxidative guanine DNA base damage

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Reviewer: dun-xian tan

Reviewer's report:

In this study, the authors examined the potential relationships between endogenous melatonin and oxidative guanine DNA base damage in human subjects. The results are very interesting and have significant clinical implications. However, several problems should be addressed.

1. The most serious problem is the age in different groups. For example, the ages of some individuals in group of daughter (51.6 years old) are older than individuals in groups either father or mother. Since melatonin production decreases with increased ages, to keep the normality of the data individuals in group of daughter who are older than those individuals in groups of father or mother should be discarded.

2. Table 1 is not necessary. The authors can simply describe the data of age and body weight in the section of M&M and convert the remaining data to graphs with the statistical symbols which presented in table 2. As a result, please delete the table.

3. What is the difference between figures 2 and 3? Simply, the same data are with different expression and please delete figure 3.

4. The reference 12 is a inadequate citation since this article has nothing to do with melatonin receptors located at nucleus or mitochondria, please correct this.

5. It would be better to cite the original article of melatonin as a potent free radical scavenger and antioxidant (Tan DX, Chen LD, Poeggeler B, Manchester LC, Reiter, RJ. Melatonin: a potent, endogenous hydroxyl radical scavenger. Endocr J 1993, 1: 57-60.).

6. There are absence of running title and key words in this manuscript.

Level of interest: An article of importance in its field

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

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