



**SDI Review Form 1.6**

**PART 1:**

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|--------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| Journal Name:            | International Journal of Biochemistry Research & Review                                                                            |
| Manuscript Number:       | <b>MS: 2012 IJBcRR 2833</b>                                                                                                        |
| Title of the Manuscript: | <b>Hormonal Sensitivity of Adenylyl Cyclase in the Myocardium, Brain and Testes of 18-month-old Non-Diabetic and Diabetic Rats</b> |

**General guideline for Peer Review process is available in this link:**

**(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)**

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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### **PART 2:** Review Comments

|                                            | <b>Reviewer's comment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here) |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><u>Compulsory</u></b> REVISION comments | <ol style="list-style-type: none"> <li>1. Metabolic syndrome (MS) including diabetes is common in elderly patients with strongly related to cardiovascular disease and cerebrovascular events. Thus research on the pathogenesis in the elderly is of great significance. Present study showed that changes of the hormonal regulation of AC system in the brain, myocardium and testes of control and diabetic rats with aging. However, the tissues belong respectively to different system. As we all know, other tissues, such as gastrointestinal, renal and even pulmonary tissue are also involved with the disease, so why are these tissues not studied? Thus, the potential interaction between the systems observed in the study should be explained reasonably in the manuscript.</li> <li>2. It is well known that gender influence on reproductive dysfunctions is different in male and female with diabetes. Therefore, the authors not only need to claim an effect of age on the changes of hormonal sensitivity of adenylyl cyclase, but also should discuss the influence of gender in the manuscript.</li> <li>3. Hormone-sensitive AC system plays an important role in the insulin secretion and regulation of glucose. As indices of the glucose metabolic abnormalities, glucose, glucose tolerance test and plasma insulin of different month of age of the models should be presented and analyzed with statistically.</li> </ol> |                                                                                                                                                                                      |



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|                                         | <p>4. Recent researches showed that insulin in central nervous system play an important role on fertility of male mice rather than that in the testes. Thus, in present experiment alteration of the AC system in testes of rats with age and diabetes contributes to the reproductive dysfunction should not be speculated conclusively.</p> |  |
| <b><u>Minor</u></b> REVISION comments   |                                                                                                                                                                                                                                                                                                                                               |  |
| <b><u>Optional/General</u></b> comments |                                                                                                                                                                                                                                                                                                                                               |  |

**Note: Anonymous Reviewer**