Reviewer’s report

Title: Islet Expression of the DNA Repair Enzyme 8-OxoG DNA glycosylase (Ogg1) in Human Type 2 Diabetes

Authors:

Bjorn Tyrberg (btyrberg@ucsd.edu)
Kamen A Anachkov (k_anachkov@doctor.com)
Sergio A Dib (sadib@endocrino.epm.br)
Jessica Wang-Rodriguez (jwrodriguez@ucsd.edu)
Kun-Ho Yoon (yoonk@cmc.cuk.ac.kr)
Fred Levine (flevine@ucsd.edu)

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Reviewer: Prof Decio Eizirik

Level of interest: A paper whose findings are important to those with closely related research interests

Advice on publication: Unable to decide on acceptance or rejection until the authors have responded to the compulsory revisions

The present study is interesting, and addresses a relevant issue for the understanding of beta-cell dysfunction in type 2 diabetes mellitus. There are, however, methodological limitations (indicated below) which need to be solved to allow clear conclusions from the data. The points mentioned below require compulsory reviewing.

1. A recent publication describes intensified reaction of 8-OhdG in pancreas obtained from type 2 diabetes patients (Diabetologia 45: 85-96, 2002). In this report, the observed staining was nuclear. This novel study should be discussed in light of the present findings.

2. Please provide more information in the Introduction on the role of Ogg1, and on the rationale of selecting this specific enzyme for the present study.

3. Information should be provided on: a. age and cause of death of all patients studied; b. the type of treatment received by the diabetic patients (insulin? oral hypoglycemic agents?); c. the criteria utilized to exclude late onset type 1 diabetes mellitus.

4. Autolytic changes are a common problem when dealing with pancreas material. Please indicate the time limit after death for tissue collection (it should, ideally, be below 2 h).

5. Please indicate how the specificity of the Ogg1 staining was confirmed.
Competing interests:

None declared.