



SDI Review Form 1.6

Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	Ms_IJBCRR_24489
Title of the Manuscript:	Disruption of disulfide bonds as a cause of insulin resistance in DM 2
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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



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PART 1: Review Comments

	Reviewer's comment	Author's comment (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)
Compulsory REVISION comments		
Minor REVISION comments	The manuscript represents a good piece of knowledge on the importance and role of disulfide bridges in insulin signalling and diabetes. Only some minor comments are there 1. There should be a figure explaining the signalling from insulin receptor and downstream intracellular signal transduction and/or one explaining receptor modification in ER, furthermore as protein transport to ER and Mitochondria follows different paths, how the ETC within mitochondria is linked with disulfide bridge formation within ER? 2. Line 89 SN2 should be given in full in first use, so is the case with other abbreviations. 3. Line 94, reticulum should be written after endoplasmic 4. Line 106, its complex-1 not complex-1. 5. Line 108, there should be nuclear before DNA. 6. Hydrogen peroxide should be written as H₂O₂ not H2O2 throughout.	Sincere thanks for the compliments. 1. The pathology focussed is within the insulin receptor ie the disulfide bond formation. Hence post receptor events including down stream images are out of perview of this paper. Receptor modification in the ER is fundamental aspect of molecular biology. Including the figures illustrating the same, is felt as redundancy of repetition, as figures abound in internet and standard text books,with free access to one and all. The objective of thia artical is to focuss a new hypothesis than being illustrative for general comprehension or educative purpose. Hence not included. Hope the authors contention and intension would be honoured. The reviewer is requested to read carefully the relevant part of the manuscript about the query regarding the protein pathwas.....etc. The author submits that what is transported from ER to ETC in the mitochondria is NOT THE <u>PROTEIN</u>, BUT THE <u>ELECTRONS</u>. The sojourn of these electrons from the insulin receptor to PDI to ERO in ER and the purpose why these electrons need to be metabolised by transfer to ETC, the fate in ETC under carbohydrate based energy metabolism as well as under beta oxidation based energy metabolism and how the incomplete metabolism of these enable PROX synthesising the disulfide bondsand and why PROX fails under conditions of beta oxidation of fats prevailing in DM2 , (because , no RET or ROS formation-takes place) etc are feared to have been missed the attention



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		of the reviewer as ppears from the nature of query posed.Hope the correct perspective is re-established. 2) SN_2 is written in expanded form. (line 89)- a Typing error 3) suggested correction is made (line94) --Typing error 4) suggested correction is made (ine106)-Typing error 5) DNA is always nuclear, unless stated other wise .(eg. extra-chromosomal DNA). Hence status quo is maintained.(line 108) 6) Sugessted change effected throughout. Hower H2O2 form of usage also abounds in article in the internet dealing with hydrogen peroxide, which is subject to verification.
<u>Optional/General</u> comments		