SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	**International Journal of Biochemistry Research & Review**
Manuscript Number:	**Ms_IJBCRR_27764**
Title of the Manuscript:	**ROLE OF OXIDATIVE STRESS MARKER MDA IN TYPE 2 DIABETES MELLITUS ASSOCIATED WITH HYPERLIPIDEMIA**
New Title	**Assessment of Oxidative Stress and Lipid Status in Patients of Type 2 Diabetes Mellitus with and without Complications**
Type of Article:	**Original Research Article**

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	**Authors' response to final evaluator's comments**
The draft has been considerably improved, but it has some changes that has to be done, see in particular the comments below 1.: **1. Please remove the phrase (newly introduced in page 7):** "Lipid peroxide is a very important compound formed by the chain reaction. Here, the non radical lipids are converted to radicals by species called ROS. The lipids have hydrogen group attached to them, and this hydrogen is having a proton and an electron. When the free radical removes this hydrogen atom, it leaves behind an unpaired electron in the lipids. This in turn leads to a chain reaction, thus reacting with other biomolecules. This lipid peroxidation results in the chain reaction and damages the various other molecules, finally leading to the cell damage. Upon lipid peroxidation, a variety of products are formed depending on the type of lipids and the location of the electron. One of These products are MDA.[27] Well it can be said that higher flux of fatty acids and glucose (due to a state of insulin resistance in type 2 DM) serve as substrates for peroxidation in DM which leads to increased formation of lipid peroxide – MDA. Also, a state of oxidative stress develops due to imbalance between free radicals and their potential scavengers (Antioxidants in vivo). Thus, greater the process of lipid peroxidation owing to uncontrolled DM with a condition of chronic hyperglycemia more is the concentration of MDA. Thus, MDA can serve as a lipid peroxide analyte to assess oxidative stress. Moreover, can be used as a oxidative stress marker" It has several confusing statements and misconceptions "Lipid peroxide is a very important compound" lipid peroxides are several different products, as PUFAs have several reactive methylene groups. "… formed by the chain reaction". Do you mean: formed during the propagation phase of lipid oxidation? "The lipids have hydrogen group attached to them…" Carbons or methylene groups have labile hydrogen atoms attached (not the lipids, they have reactive hydrogen atoms in their structure). "this hydrogen is having a proton and an electron.." not only this, but every hydrogen has!! "When the free radical removes this hydrogen atom, it leaves behind an unpaired electron in the lipids" free radicals are able to abstract a proton, leaving an unpaired electron…. "Well it can be said that higher flux of fatty acids and glucose.." do you mean higher plasma concentrations of fatty acids and glucose? 2. Correct in Table 4 and the paragraph below it the expression of p values adding the zero before the dots (mainly to be consistent with the way they were expressed before in the text).	

3. Revise, looking for capital letters incorrectly placed (some examples): Line 220: (Mean values…) Line 227: Moreover, A positive… Line 266: These 4. In Table 1, correct: Systolic BP (mm Hg)and Diastolic BP (mm Hg) 5. Correct: Line 52: defene~~s~~e; Line 26: secret~~o~~ary; Line 157: signal~~l~~ing	

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