



SDI Review Form 1.6

PART 1:

Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	MS: 2013_IJBcRR_3268
Title of the Manuscript:	Structural Mapping of Inhibitor Binding Sites on P-glycoprotein: Mechanism of Inhibition of P-glycoprotein by Herbal Isoflavones.

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

	Reviewer's comment	Author's comment <i>(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)</i>
<u>Compulsory</u> REVISION comments	This is a well devised and well thought paper. The aim is identified and the experimental results give a positive answer to the questions raised. The biochemical nature of binding of isoflavones to Pgp has been previously reported, but the atomic details of their interactions were not clarified before this study. The authors used <i>in silico</i> methods to study binding of two types of isoflavones called aglycones and glycosides to Pgp in order to achieve the objectives. The docking studies of isoflavones on Pgp was performed by Grid-Based Ligand Docking with Energetic (GLIDE). Structure analysis revealed that addition of polar group to hydrophobic ligand may enhance its binding affinity for Pgp, which can be used for designing potent ligand to inhibit Pgp to find compounds for drug design against Pgp and to prevent multidrug resistance.	
<u>Minor</u> REVISION comments	I might say that an English language refurbishment is welcome, nonetheless language is fairly acceptable.	
<u>Optional/General</u> comments		



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