

## Review Form 1.7

Journal Name:	<b>International Journal of TROPICAL DISEASE &amp; Health</b>
Manuscript Number:	<b>Ms_IJTDH_97838</b>
Title of the Manuscript:	<b>Burden of drug resistance in vivax malaria in India - A brief update</b>
Type of the Article	<b>Review Article</b>

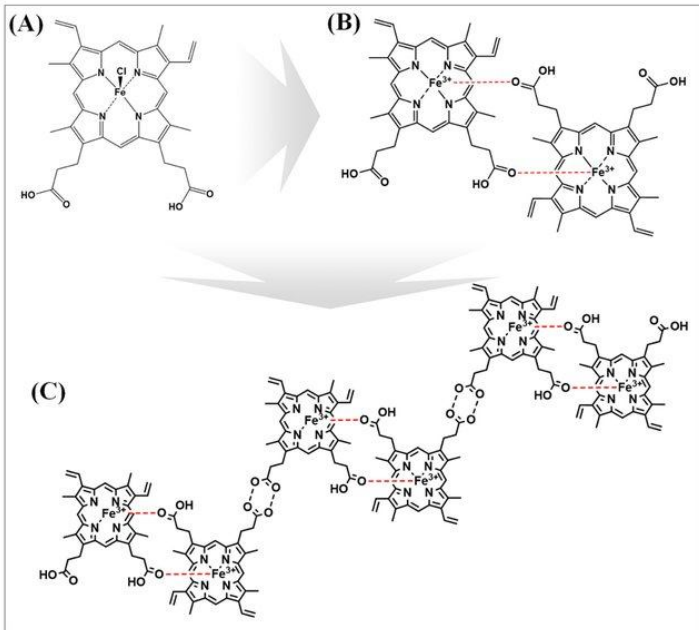
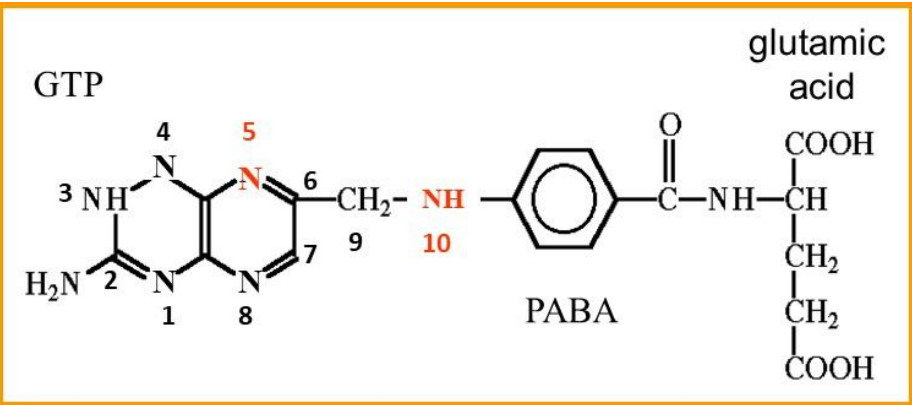
### **General guideline for Peer Review process:**

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:

(<https://www.journalijtdh.com/index.php/IJTDH/editorial-policy> )

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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)
<p><b>Compulsory REVISION</b> comments</p> <ol style="list-style-type: none"> <li><b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li><b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li><b>Is the abstract of the article comprehensive?</b></li> <li><b>Are subsections and structure of the manuscript appropriate?</b></li> <li><b>Do you think the manuscript is scientifically correct?</b></li> <li><b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> <li>The meaning of the following acronyms should be clarified: ACTs</li> <li>The authors should add a more complete explanation of the mechanism by which the parasite avoids the toxicity of the released HEME group, and the specific action of chloroquine (inhibiting the polymerization of HEME groups). This explanation would be clearer if it is accompanied by a graph outlining said processes, which occurs in the parasite's food vacuole (the attached figure is a model taken from the cited reference).</li> </ol>  <p>Ref: Lee JH, Kim HR, Lee JH, Lee SK, Chun Y, Han SO, Yoo HY, Park C, Kim SW. Enhanced In-Vitro Hemozoin Polymerization by Optimized Process using Histidine-Rich Protein II (HRPII). Polymers (Basel). 2019 Jul 8;11(7):1162. doi: 10.3390/polym11071162.</p> <ol style="list-style-type: none"> <li>A figure with the molecular structure of folate is required, indicating the binding sites of the one-carbon groups</li> </ol> 	

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	<p>4. The potential use of MTX should be mentioned and discussed in the context of the use of antifolates in malaria.</p> <p>See references:</p> <p>Sheehy TW, Dempsey H. Methotrexate Therapy for Plasmodium vivax Malaria. <i>JAMA</i>. 1970;214(1):109–114. doi:10.1001/jama.1970.03180010051011</p> <p>Irungu B, Kiboi D, Langat B, Rukunga G, Wittlin S, Nzila A. Methotrexate and aminopterin lack in vivo antimalarial activity against murine malaria species. <i>Exp Parasitol</i>. 2009 Oct;123(2):118-21. doi: 10.1016/j.exppara.2009.06.007</p> <p>Imwong M, Russell B, Suwanarusk R, Nzila A, Leimanis ML, Sriprawat K, Kaewpongsri S, Phyo AP, Snounou G, Nosten F, Renia L. Methotrexate is highly potent against pyrimethamine-resistant Plasmodium vivax. <i>J Infect Dis</i>. 2011 Jan 15;203(2):207-10. doi: 10.1093/infdis/jiq024</p> <p>More comments about Resistant to artemisinin mechanism should b done</p> <p><b>Resistant to artemisinin</b> Delayed parasite clearance is associated with point mutations in the propeller domain of the in the propeller domain of the P. falciparum Kelch13 protein. (see refernces: a- Arieu, F.; et al. A molecular marker of artemisinin-resistant Plasmodium falciparum malaria. <i>Nature</i> 2014, 505, 50–55. b- Uwimana, A.; et al. Emergence and clonal expansion of in vitro artemisinin-resistant Plasmodium falciparum kelch13 R561H mutant parasites in Rwanda. <i>Nat. Med.</i> 2020, 1602 Complete revision of artemisinin mechanisms have been reviewed in Siddiqui G, et al. . Peroxide Antimalarial Drugs Target Redox Homeostasis in Plasmodium falciparum Infected Red Blood Cells. <i>ACS Infect Dis</i>. 2022 Jan 14;8(1):210-226. doi: 10.1021/acsinfectdis.1c00550.</p>	
<p><b>Minor</b> REVISION comments <b>1. Is language/English quality of the article suitable for scholarly communications?</b></p>		
<p><b>Optional/General</b> comments</p>		

**PART 2:**

	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)
<p><b>Are there ethical issues in this manuscript?</b></p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

**Reviewer Details:**

<p>Name:</p>	<p><b>Alberto Lazarowski</b></p>
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