



SDI Review Form 1.6

Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	Ms_IJTDH_31322
Title of the Manuscript:	Influence of substituents nature on the antiplasmodial and cytotoxic activities of 5-chloro-3,4-dihydro-1H-pyrano[3,4-b]-1,10-phenanthrolinone as antimalarial agent
Type of the Article	Original Research 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	- Line 7-11- The content does not qualify for a purpose for the study. The purpose should be re-written. - Line 19-20 – The conclusion should also be re-written and should be in agreement with the purpose. - Line 38 – 40 – the sentence beginning with “....in previous studies..... and ending with “resistant <i>Plasmodium strains</i>” in not clear. Kindly reconstruct the sentence to bring out the meaning well. - Line 47-49 – The sentence beginning with “Access to product 2” and ending with “amino groups” should be re-written. - Line 51 – full stop missing after the word “molecules”. Citation is also needed for the statement in Line 49-51. - Line 101 - what was used to adjust the pH? kindly indicate it. - Line 101 - how can the aqueous layer be extracted with dichloromethane? - Line 103-104 – “was the crude solid obtained either precipitated in cold ether or passed through	Sentence was revised by adding the word «our) in our previous Line 47-49, the sentence was rewritten Line 51- OK Line 101. The basic solution used to adjust the pH is indicated in the text Line 101, using dichloromethane will move the compounds from aqueous phase to organic phase Some of them were precipitated in cold ether, and others were purified by flash chromatography. The precision is given in the supplement info part



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	flash chromatography depending on the nature of amine group involved or all were precipitated in cold ether and then purified with chromatography? kindly clarify 9. Line 202 – figure 4 does not correspond with the indicated information. Kindly rectify. 10. Line 221-222 – the sentence, “.... <i>Indeed, most the IC₅₀ is greater...</i>” is not clear. Kindly reconstruct to bring out the meaning 11. Line 223-224 – the sentence, “.... <i>However, the selectivity index.....</i>” is not clear. Kindly reconstruct the sentence 12. Line 239 – reference not properly cited. 13. Line 258 – reference not properly cited.	Line 202. The correction was done Line 221-222. Sentence is clear in our understanding. Line 223-224-The sentence was rewritten Line 239 and line 258- Correction were made
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Minor REVISION comments	1. Line 18 – replace “less” with “least” 2. Line 27 – “..... world health Organization” should rather read World Health Organization 3. Line 27 – “fever malaria deaths were” should rather read, “malaria febrile deaths” 4. Line 30 – “parasite” should read “parasites” 5. Line 32-33 – the sentence on Line 33 should be continuous with that on line 32. 6. Line 35 – “additional” should rather read “addition” 7. Line 33 – “analogs” should read “analogues”. 8. Line 42 – “informations” should rather read “information” 9. Line 42 – “activities” should read “activity”. 10. Line 42 – “compound” should read “compounds” 11. Line 43 – “we used an efficient oxidation route by using 1.5 equivalent of SeO₂ in pyridine at 50 °C” should read “an oxidation route involving 1.5 equivalent of SeO₂ in pyridine at 50 °C was adopted” 12. Line 45 – replace “enhanced” with “modified” 13. Line 45-47 - “two compounds were formed, besides compound 2, compound 3 which can be in two tautomeric forms 3a and	Line 18- correction was mad Line 27 OK Line 27- the sentence was rewritten Line 30 OK Line 32-33 OK Line 35- OK Line 33 OK OK Ok Line 43, Sentence was rephrased Line 45 OK
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	3b should rather read “two compounds were formed including compound 2. The other compound formed, compound 3 appears in two tautomeric forms 3a and 3b” 14. Replace “on” with “against on lines 53, 56, 160 and 181. 15. Line 54 – delete the word “type” 16. Line 55 – introduce comma after the word “pattern” 17. Line 57 – replace “it was an interesting challenge” with “the challenge was thrown” 18. Line 57– delete the following phrases: “on one hand” 19. Line 57 – replace “reactivity” with “reactivity and antiplasmodial activities” 20. Line 58-59 – replace “its of its analogs obtained by substitution of the chloride in position 5 with different amino group mentioned in” with “its amino groups substituted analogues (substitution on position 5 originally occupied by chloride ion) respectively” 21. Line 76 – replace “deuterium” with “deuterated” 22. Line 86 - content on line 87 should be moved to line 86 23. Line 90-91 – “The hot solution was filtered and the solvent was evaporated to give a residue	The corrections were made Corrections were done Line 57- corrections was made Line-58-59. Sentence was rewritten Line 76 OK
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	<i>which was after addition of a little amount of water, extracted with chloroform</i> should be changed to <i>The hot solution was filtered and the solvent evaporated to give a residue. After addition of a little amount of water to the residue, it was extracted with chloroform</i>	Line 90 91, the corrections were made
	24. Line 92 – “Na₂SO₄” should read “anhydrous Na₂SO₄”	OK
	25. Line 98 – “was added the amine compound” should read “the amine compound (substituent) was added”	OK
	26. Line 99 – “Back at room temperature” should rather read “Cooled down to room temperature”	OK
	27. Line 106 – delete the word “references” and introduce a colon between “strains” and “FcB₁...”	Line 6. We have in the lab other strains of Plasmodium witch are not references for antiplasmodial activity.
	28. Line 107 – delete “considered to”	Line 107 OK
	29. Line 108 – replace “by” with “in literature”	
	30. Line 110 – replace “on” with “in”	Line 110
	31. Line 112 – “add” should read “added”	Line 112 OK
	32. Line 113 – replace “growing” with “different”	Line 113 OK
	33. Line 114 – “added in” should read “added to”	Line 114 OK
	34. Line 114-115 – “The plates were returned in incubator for 24 h more” should rather read “The plates were further incubated for additional 24 hours”	The corrections were made



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	35. Line 115 – introduce a comma between “(Perkin-Elmer)” and “[³H]” 36. Line 118 – replace “comma” between (IC50) and compared with “and” 37. Line 118-119 – replace “control without drugs (100% incorporation) and red blood cells without parasites (0% incorporation)” with “controls” 38. Line 121 – replace “than” with “as” 39. Line 135 – “favorable” should be “favourable” 40. Line 165 – contents on line 169 should be moved to line 165. 41. Line 170 - move contents of line 171 to line 170 42. Line 174 - move contents of line 175 to line 174 43. Line 177 – delete the word “such” 44. Line 180 – replace “function” with “group” 45. Line 182 – “Compared” should rather read “However, when compared” 46. Line 183 – “.... compound 2 presented the most interesting antiplasmodial activities” should rather read “compound 2 showed a relatively higher antiplasmodial activity” 47. Line 184 – delete the word “significant”. Avoid the	Line 115 OK Line 118 OK Line 119 The corrections were made Line 21, OK Line 135, OK OK OK OK OK OK Line 84, the sentence was rewritten
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	use of "significant" in scientific writings especially when there are no statistical results to indicate so.	
	48. Line 192 – delete the phrase " <i>in fact</i> "	OK
	49. Line 192-193 – replace " <i>more interesting activities than those of the compound 2 on the three P. falciparum studied strains</i> " with " <i>registered higher activities than Compound 2 against all three strains of the Plasmodium parasite</i> ".	Line 192-193, the sentence was rewritten
	50. Line 194 – replace " <i>providing</i> " with " <i>provision</i> "	OK
	51. Line 195 – replace " <i>release</i> " with " <i>releases</i> ".	OK
	52. Line 196-197 – " <i>parasite polymerize</i> " should rather read " <i>the parasite polymerizes</i> "	OK
	53. Line 201 – comma should be introduced between "hemozoin" and "which....."	OK
	54. Line 205-205 – indicate the year for the citation in the text, that is, Pashska and coworkers (year)	OK
	55. Line 209 – " <i>informations</i> " should read " <i>information</i> ". Same on line 210	OK
	56. Line 211 – " <i>conformationnaly</i> " should read " <i>conformationally</i> "	OK
	57. Line 216 – " <i>result</i> " should rather read " <i>resulted</i> "	OK
	58. Line 291 – " <i>favorably</i> " should read " <i>favourably</i> "	OK
	59. Line 220 – " <i>are least</i> " should read " <i>showed less</i> "	OK



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	60. Line 221 – “respectively” should read “respectively being” 61. Line 228-230 – delete the sentence starting with “<i>Drug resistance</i>” and ending with “<i>exempt of any resistance</i>”. The sentence is not needed in a conclusion 62. Line 232 – “lead” should read “led” 63. Line 232-233 – replace “<i>provide interesting lead in our search for the activity improvement of compound 2</i>” with “<i>synthesized showed higher activity as compared to the parent compound 2</i>” 64. Line 234 – delete “conducting” 65. Line 237 – delete “P”	Line 232-233, the sentence was rewritten OK OK
<u>Optional/General</u> comments	The manuscript generally contains lots of grammatical mistakes and poor sentence construction. Authors should kindly go through it and make the manuscript better than its current state.	