

Review of: "A Novel One-Pot Three-Component Approach to Orthoaminocarbonitrile Tetrahydronaphthalenes Using Triethylamine (Et_3N) as a Highly Efficient and Homogeneous Catalyst Under Mild Conditions and Investigating Its Anti-cancer Properties Through Molecular Docking Studies and Calculations"

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Potential competing interests: No potential competing interests to declare.

Comments of the paper entitled:

A Novel One-Pot Three-Component Approach to Orthoaminocarbonitrile Tetrahydronaphthalenes Using Triethylamine (Et_3N) as a Highly Efficient and Homogeneous Catalyst Under Mild Conditions and Investigating Its Anti-cancer Properties Through Molecular Docking Studies and Calculations

Dear Dr. Editor of Qeios journal

Greetings. I am really sorry to say that this publication has lots of discrepancies, blunders, and is of low quality. I have no idea about the standard of your journal. Please take a call.

So this paper is **rejected** for the following reasons:

- 1. Author lacks clarity on the subject.
- 2. The nomenclature of tetrahydronaphthalene is ambiguous and hence wrong. This is a journal article. An exact name should be given...not a general term.
- 3. The author describes heterocyclic compounds and claims that their product is a heterocyclic compound. Their compound, as shown by the structure, is a carbocyclic compound and not a heterocycle.
- 4. The reaction is done under reflux and hence not mild conditions. Refluxing at 70 degC for 8 hours is not a mild condition. Actually, a report on morpholine and ethanol at RT is already reported and gives a better yield.....In that way, this paper lacks novelty.
- 5. Author does not state whether these compounds are new or already known....The authors report only 1H NMR data.

 Crude NMR of this reaction should be submitted to analyse the authenticity of this reaction and its purity.
- 6. Mechanism has errors. No experimental evidence done or any back reference quoted to support the mechanism.
- 7. Title is given like an abstract...Too long with mistakes.
- 8. Introduction lacks clarity.



- 9. No connection or continuity in the results and discussion part.....author talks about unnecessary chemotherapy... cancer....tumour... etc. But should have discussed the activity of similar compounds already reported in literature...... Similar carbocyclic compounds' activities could have been quoted.
- 10. Authors do not talk about any impurities. No spectral data provided as proof of their data. Just 1H NMR is not enough to show its purity. Since NH2 groups are there, authors could have taken D2O exchange NMR and IR to prove the structure.
- 11. Compound numbers are not mentioned in all schemes.
- 12. Already there are many reports on the synthesis of these 2-amino-4-phenyl-tetrahydronaphthalenes.....such as Polycyclic Aromatic Compounds Volume 43, 2023 Issue 7, 6249; Applied Organometallic Chemistry, Volume 38, Issue 1, January 2024, e7305, etc. There are many more reports......Authors should quote these and provide valid justification for their work.

A proper docking expert needs to look into the data for authenticity, since I am not an expert on it. Lack of critical comments in the docking studies data... Authors claim docking studies are investigated. How did they investigate? No proofs or details of investigation given.

Overall comments: Nothing new in this work. No clarity. Not well written, etc. Authors do not mention or explain why their work is better than the literature work.