

Review of: "Synthesis and Antibacterial Screening of Cefradine Schiff Bases and Their Metal Salts"

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Potential competing interests: No potential competing interests to declare.

Cefradine derivatives were synthesized and characterized by ^1H NMR and IR spectroscopy. All the synthesized compounds were evaluated for anti-bacterial activity against two bacterial strains *S. aureus* and *E. coli*. The overall presentation of data is well done. The quality and quantum of work are just satisfactory. Below are my findings to improve the quality of this work. The same can be assessed as a major revision.

1. The formation of each synthesized Schiff base ligand and metal salt must be analyzed by UV-Vis studies, mass spectrometry (which could be the best proof of the formation), single crystal XRD (if possible, at least one structure), besides FTIR and NMR.
2. The UV-Vis, FTIR, and NMR (^1H and ^{13}C) spectra must be added along with the presented data.
3. Physical parameters like color, melting point, and the elemental analysis must be incorporated.
4. What is the basis for selecting this metal hydroxide/salt that reacts with the synthesized Schiff base? Why not other metal ions, especially those with vacant orbitals?
5. Molecular docking studies can be a huge support if added.
6. A comparison with other related studies is a must.
7. A few complexes can be paramagnetic, as per my knowledge. In such a case, ESR/EPR studies are needed.
8. I recommend the publication of this article after addressing the comments of the reviewers.