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.

1- The synthesized compounds showed low activities compared to cefradine, which could be attributed to the involvement of the free amino group of cefradine in the synthesis of imine derivatives.

2- The study does not provide information on the specific antibacterial activities of the synthesized compounds against Staphylococcus aureus and Escherichia coli.

3- The study does not mention the specific methods used for the antibacterial screening of the synthesized compounds.

4- The study lacks information on the purity and characterization of the silver salts obtained after re-crystallization.

5- The study does not provide details on the specific IR and NMR spectroscopic data used to ascertain the structures of the synthesized compounds.

6- Provide specific antibacterial activity results for each synthesized compound against Staphylococcus aureus and Escherichia coli, using a standardized method such as the agar well diffusion method.

7- Include information on the purity and characterization of the synthesized metal salts, particularly the silver salts obtained after re-crystallization.

8- Present detailed spectroscopic data, such as IR and NMR spectra, to support the structural characterization of the synthesized compounds.

9- Include a discussion on the potential mechanisms of action for the synthesized compounds and their metal salts, based on their chemical structures and known antibacterial properties.

10- Conduct further studies to investigate the cytotoxicity and selectivity of the synthesized compounds, as well as their potential for overcoming drug resistance.

11- Consider evaluating the synthesized compounds against a broader range of bacterial strains to assess their spectrum of activity.