Review of: "Investigation and Synthesis of Benzothiazole-Derived Schiff Base Ligand Against Mycobacterium tuberculosis"

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Potential competing interests: No potential competing interests to declare.

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Title: Investigation and Synthesis of Benzothiazole-Derived Schiff Base Ligand Against Mycobacterium tuberculosis

This manuscript presents a well-conducted investigation with strong experimental and computational data. It provides important information about the capabilities of the synthesized Benzhydrylidene-(6-methyl-benzothiazol-2-yl)-amine (MTA) Schiff base ligand for versatile application in anti-tuberculosis (anti-TB). This work is acceptable for publication with just minor revisions, such as explaining the research gap in the introduction, expanding on the computational results, and providing additional practical insights in the discussion. Comments below should be addressed in the revised manuscript.

- In the abstract section, include a brief discussion of the theoretical models utilized and how they contributed to the overall conclusions.
- The introduction is well-cited and establishes the importance of Schiff bases as anti-mycobacterium tuberculosis, citing recent and major research. The section may benefit from a more specific explanation about the research gap addressed by this study. It would also be useful to highlight why these newly synthesized Schiff bases are predicted to outperform previously tested inhibitors.
- The methodology is comprehensive, and the experimental techniques are well-documented to ensure reproducibility. It would be nice to offer a reason for the Schiff base concentrations used in the tests.
- The X-axis in Figure 1b is unclear; please adjust it.
- The resolution of Figure 2 has to be adjusted; it is undistinguishable.
- The conclusion might be strengthened by providing potential future research directions.