

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.

The article was proposed to synthesize some Benzothiazole-derived Schiff Base ligands against Mycobacterium tuberculosis. The purpose of the article was interesting. However, many parts of the work should be revised, and much work should be appended.

1. Grammar mistakes were found in many parts of the manuscript.
2. Actually, the benzothiazole group-based anti-mycobacterium agents were more popular than Schiff-Base-based ligands. There's no evidence that the Schiff-Base structure contributed to its pharmaceutical activities.
3. The results of the anti-mycobacterium tuberculosis should be assayed and listed. Even though there has been a docking simulation, there is still a need for the measured data to support the simulations. The simulated binding affinity was not so accurate in my experiment.
4. "The molecular docking score was $-8.1 \text{ kcal mol}^{-1}$ for the MTA Schiff base ligand, whereas $-4.6 \text{ kcal mol}^{-1}$ is reported for the standard drug (Pyrazinamide)". I really don't know whether the $-4.6 \text{ kcal mol}^{-1}$ for the standard drug (Pyrazinamide) was simulated by Autodock or it was calculated by the function: $\Delta G = RT \ln(IC_{50})$? If the value was derived from Autodock, the calculated binding affinity was wrong and can't be compared with the MTA Schiff base ligand.