Review of: "Synthesis of 1, 2-Disubstituted Benzimidazoles at Ambient Temperature Catalyzed by 1-Methylimidazolium Tetraflouroborate ([Hmim] BF_4) and Investigating Their Anti-ovarian Cancer Properties Through Molecular Docking Studies and Calculations"

Pinky Gehlot[1]

1 Nirma University

Potential competing interests: No potential competing interests to declare.

This paper presented an interesting work on “Synthesis of 1, 2-Disubstituted Benzimidazoles at Ambient Temperature Catalyzed by 1-Methylimidazolium Tetrafluoroborate ([Hmim] BF_4) and Investigating Their Anti-ovarian Cancer Properties Through Molecular Docking Studies and Calculations”. The presented work covers the role of 1-methylimidazolium tetrafluoroborate ([Hmim] BF4) as an effective catalyst in the synthesis of benzimidazoles and the evaluation of their anti-ovarian cancer properties. Although the manuscript can be further improved by incorporating the following comments and suggestions:

1. There are several typos and grammatical errors throughout the manuscript. Authors need to correct all the errors and edit the text in English as per the requirements.
2. Why was the analytical spectral data not added to the manuscript? Please comment and update the paper by including the analytical spectral data such as IR, melting point, 1H, 13C NMR, and Mass spectra along with the final product's physical properties like colour and appearance.
3. Are these known compounds or novel compounds? A statement with justification must be included in the manuscript on the novelty of the molecules.
4. As per the authors' statement, benzimidazole has a role in various diseases. Can the authors explain the role of benzimidazole in ovarian cancer by docking interaction?
5. Why did the authors select the benzimidazole moiety instead of another heterocyclic moiety? Please comment.
6. Has the author used any software to predict physicochemical properties? Please mention the software name.
7. Correct the Lipinski rule in the manuscript.
8. Why did you select PDB ID: 6LAD? Are you validating the PDB IDs for the target?
9. Which computational strategy is used to design the molecules?
10. Add the unit of the mentioned quantities in the paper for better readability and understanding of the readers.