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"

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Potential competing interests: No potential competing interests to declare.

The manuscript deals with the environmentally benign method for the synthesis of 1, 2-disubstituted benzimidazoles by the reaction of aromatic aldehydes and o-phenylenediamines (OPD). Such synthesis was carried out at room temperature by using 1-methylimidazolium tetrafluoroborate ([Hmim] BF_4) as a catalyst. The investigations into their anti-ovarian cancer properties through molecular docking studies and calculations are also reported.

The 1-methylimidazolium tetrafluoroborate ([Hmim] BF_4) results in an effective catalyst in the synthesis of benzimidazoles by arylaldehydes with o-phenylenediamine, showing high efficiency and short reaction times.

The paper is interesting, and I believe that with the following minor revisions, it is worthy of publication in this journal.

1. In Table 1, looking at the scheme of the reaction, it is not specified the nature of R (probably R=H).
2. The amount of catalyst used is indicated as [Hmim] BF4 (10 mol %): It should be better specified in the experimental section if 10 mol % is the concentration of the catalyst in the solvent (4 ml) or if it is 10% of the substrate (aldehydes or o-phenylenediamines?).
3. The reaction time (h) in some entries of Table 3 is indicated with too many decimal places. This needs a revision: I think it is better to indicate reaction times by expressing the unit of measurement in minutes.