

Review of: "[Review Article] Green Strategies for the Synthesis of Quinolone Derivatives"

Ruchi Bharti¹

¹ Chandigarh University

Potential competing interests: No potential competing interests to declare.

Overall, the manuscript provides a comprehensive overview of the significance, structure, pharmacological activities, and chemical interactions of quinolone derivatives. The authors have presented a thorough synthesis of existing literature, highlighting both the advancements and challenges in this field. The manuscript provides a comprehensive overview of various synthetic methods for producing quinolone derivatives. The schemes provided offer a clear and organized presentation of each synthesis technique. However, it would enhance readability to provide a brief introduction or summary at the beginning of each scheme, outlining the key steps and reactions involved. This would help readers grasp the main points more easily.

Below are some specific comments for improvement:

Consider reorganizing the content into subsections with clear headings to enhance readability.

Each section should have a clear introductory statement summarizing the key points to be discussed, followed by detailed explanations and supporting evidence.

Figures play a crucial role in illustrating key concepts. Ensure that all figures are clear, properly labeled, and directly relevant to the text.

Provide more descriptive captions for figures to elucidate their significance without solely relying on references. Captions should briefly explain what the figure demonstrates and its relevance to the manuscript.

Some references appear outdated, and it is essential to incorporate recent advancements in the field.

The section discussing the pharmacological activities of quinolone derivatives provides valuable insights into their diverse therapeutic potentials. However, consider organizing the subsections based on specific activities (e.g., antiviral, anticancer) for better clarity.

Provide a brief rationale or context for each pharmacological activity discussed to help readers understand the significance of the findings.

The discussion on chemical interactions of quinolone derivatives is highly technical and may be challenging for non-specialist readers to comprehend. Consider simplifying complex terminology and providing additional context to make the content more accessible.

The manuscript would benefit from a concise conclusion summarizing the key findings and implications discussed throughout the text. Reinforce the significance of quinolone derivatives in drug development and highlight potential future directions for research in this area.

Review the manuscript for grammatical errors, typos, and awkward phrasing. Ensure that the language used is clear, concise, and appropriate for the intended audience.

Addressing these comments will enhance the clarity, coherence, and overall quality of the manuscript, making it more impactful and accessible to the readership.

Overall, the manuscript provides a thorough overview of various synthetic methods for producing quinolone derivatives. Addressing the aforementioned points would further enhance the clarity, depth, and coherence of the review, making it a valuable resource for researchers in the field of medicinal chemistry and drug development, and the same can be considered for publication.