



## Review report

**Title:** A Comprehensive Review on Indole Nucleus with Therapeutic Significance

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### Comments:

Reviewer's Comments to Author		Authors Response	Modifications: Page no/ Paragraph no/ Line no.
Originality:	<<yes.>>		
Scientific Quality:	<<scientific quality is good>>		
Relevance to the Field(s) of this Journal:	<< present review article highly relevant to the present journal>>		
General Comments:	<p>In the present article, the authors demonstrated the Comprehensive Review on Indole Nucleus with Therapeutic Significance. Overall the manuscript was well written. However, some minor mechanistic explanations are missing which needs to be addressed before publication.</p> <ol style="list-style-type: none"><li>1. Author stated in the Introduction section that "Indole is a notable privileged lead scaffold arises in several natural products such as alkaloids, peptides and various synthetic compounds" Please cite appropriate references.</li><li>2. To create a potential impact on readers and significance of Indole based compounds in medicine, authors should add an additional Table (besides Table 1) regarding the clinically approved Indole based drugs.</li><li>3. Silver nanomaterials /compounds are most widely explored as an antibacterial nanoagents due to its broad-spectrum antimicrobial properties and robust antimicrobial effectiveness against various bacteria, viruses, and fung. So author should explain how indole based compounds are more significant antibacterial activities than silver compounds. (cite the following ref: Journal of Nanoparticle Research volume 12, pages1531–1551(2010); Nanoscale, 2020,12, 12970-12984; Antibiotics 2018, 7(4), 93;</li></ol>	<p>1. I have cited the suitable reference in the text body of manuscript with highlighted text.</p> <p>2. Thank you for suggestion. There are several clinically approved drug and information regarding the same.</p> <p>Therefore, I avoided to include such table which is out of thematic topic. I will add such information in our coming review.</p>	

	<p>Front. Microbiol., 16 November 2016   <a href="https://doi.org/10.3389/fmicb.2016.01831">https://doi.org/10.3389/fmicb.2016.01831</a>).</p> <ol style="list-style-type: none"> <li>4. Author should explain the antibacterial activity mechanism of Indole based compounds.</li> <li>5. Author should discuss about the cellular toxicity effects of Indole based compounds while accessing the anti-bacterial, malarial, fungal, virus applications.</li> <li>6. Author should describe more in detail about the future perspectives of Indole based compounds in therapeutics</li> </ol>	<p>3. I have added suitable text and findings of the referred paper and highlighted the text and reference.</p> <p>4. I have added a paragraph on mechanistic view of action of antibiotics.</p> <p>5. In this review, we mainly, focused on chemistry aspects and our next review is on molecular understanding of indole drug for diverse pharmacological therapy. I would like to include your comment in next paper which in continuation of this review.</p> <p>6. I have added future perspective of indole based drugs too.</p>	
Reviewer's Decision	Minor revisions needed		