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| Book Name: | [**Chemistry and Biochemistry: Research Progress**](https://www.bookpi.org/bookstore/product/chemistry-and-biochemistry-research-progress-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_5493** |
| Title of the Manuscript: | **Secondary Metabolites: Natural Sources and Therapeutic Applications** |
| Type of the Article | **Book Chapter** |

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | Yes, upon careful review, this book chapter provides an updated overview of secondary metabolites and highlights novel findings. Its emphasis on the therapeutic potential of phytocompounds offers new insights into their pharmacological relevance and possible correlations with disease treatment. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | Suggested title is “Bioactive secondary metabolites: A natural blueprint towards therapeutic approach**”.** |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | Specify the individual metabolites and clearly associate them with the relevant diseases. |  |
| **Is the manuscript scientifically, correct? Please write here.** | Add a detailed paragraph on advanced drug delivery systems utilized for the effective delivery of secondary metabolites.  Define some more updated metabolites.  Provide comprehensive scientific information on the specific bioactive compounds involved, including their chemical nature, mechanisms of action, and therapeutic applications. Clearly define the natural sources of these metabolites—whether plant (mention name), bacterial, fungal, or animal origin—to ensure clarity and accuracy (mentioned name scientifically with reference).  Additionally, include a note on the future potential of these systems, highlighting their role in revolutionizing modern medicine through targeted delivery, enhanced bioavailability, and controlled release. Discuss current monitoring strategies and technologies used to evaluate their pharmacokinetics and therapeutic efficacy. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | 1.Swain SS, Singh SR, Sahoo A, Hussain T, Pati S. Anti-HIV-drug and phyto-flavonoid combination against SARS-CoV-2: a molecular docking-simulation base assessment. J Biomol Struct Dyn. 2022;40(14):6463-6476. doi: 10.1080/07391102.2021.1885495.  2. Swain SS, Singh SR, Sahoo A, Panda PK, Hussain T, Pati S. Integrated bioinformatics-cheminformatics approach toward locating pseudo-potential antiviral marine alkaloids against SARS-CoV-2-Mpro. Proteins. 2022;90(9):1617-1633. doi: 10.1002/prot.26341.  3. Sahoo A, Jena AK, Panda M. Experimental and clinical trial investigations of phyto-extracts, phyto-chemicals and phyto-formulations against oral lichen planus: A systematic review. J Ethnopharmacol. 2022;298:115591. doi: 10.1016/j.jep.2022.115591.  4. Sahoo A, Swain SS, Jena AK, Panda M. Therapeutic Suitability of Functional Phyto‐Oils Against Oral and MDR‐Pathogens Through Nanotechnology. Nanotechnology in Functional Foods. 2022 Jul 26:137-60. |  |
| Is the language/English quality of the article suitable for scholarly communications? | No need. |  |
| Optional/General comments | Include a scientifically informative figure to enhance the chapter's impact, and present key information in a tabulated format to improve clarity and reader engagement. |  |

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| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in detail)* |  |

**Reviewer details:**

**Alaka Sahoo, Siksha ‘O’ Anusandhan Deemed to be University, India**