

Review Form2

Book Name:	Medicine and Medical Research: New Perspectives
Manuscript Number:	Ms_BPR_2397
Title of the Manuscript:	Hydrolytic Enzymes Targeting to Prodrug/Drug Metabolism for Translational Application in Cancer
Type of the Article	Book chapter

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	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. Why do you like (or dislike) this manuscript? A minimumof 3-4 sentences may be required for this part.	The research gap identified in the manuscript revolves around the need for further investigation into the enzyme-mediated prodrug activation specifically in the context of cancer treatment. Key areas that require more research include: <u>Organ/Tissue Distribution</u>: There is a need to explore the distribution and levels of prodrug-activating enzymes across different organs, tissues, and within various cellular compartments, particularly distinguishing between normal and tumor tissues. <u>Optimization of Prodrug Substrates</u>: Further research is needed to develop a series of prodrug analogs to determine the optimal substrates that exhibit high specific activity and rapid enzyme turnover rates, leading to faster and more efficient prodrug cleavage inside tumor cells. <u>Impact of Modulators on Enzyme Activity</u>: Studies like those mentioned involving Lithium as a modulator to enhance the activity of carboxylesterases in brain tumor cell lines suggest that the role of chemical modulators in improving enzyme activity and drug metabolism in cancer therapy is an underexplored area that warrants more detailed investigation. These gaps point towards the necessity for in-depth studies on enzyme activities, prodrug analogs, and modulating agents to improve the efficacy and specificity of cancer treatments through enzyme-mediated drug activation.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
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.	Yes	
Are subsections and structure of the manuscript appropriate?	Yes	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimumof 3-4 sentences may be required for this part.	- Discuss the clinical relevance of the enzymes and prodrugs studied, including their potential impact on cancer treatment outcomes. This could involve analyzing clinical trial data or case studies. - Address challenges in translating enzyme-targeted therapies to clinical practice and propose potential solutions or future research directions. - If applicable, suggest a detailed experimental design or framework for future research that	

Review Form2

	could fill the identified gaps. This might include specific assays, models, or methods for studying enzyme activity. 4. Ensure robust data analysis methods are discussed, particularly if the article includes original research data. Statistical methods, control comparisons, and reproducibility should be emphasized.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Author must include recent year articles to improve the quality.	
Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	1. Ensure that the language is precise and technical, suitable for an academic audience. Avoid overly complex sentences and jargon that might confuse readers. 2. Organize the content so that it flows logically, from introduction to conclusion. Ensure that each section leads naturally to the next, with clear transitions.	
Optional/General comments	1. Clearly define and emphasize the specific research gaps in the introduction or conclusion. This will guide the reader on the significance of the research and its contribution to the field. 2. Outline the main objectives of the review. This could include identifying key enzymes involved in prodrug activation, exploring challenges in enzyme-targeted therapies, or proposing potential solutions. 3. Ensure that the literature review covers the most recent studies and trends in the field. Include more recent references to show the evolution of the field and where your research fits in. 4. Compare and contrast various approaches to enzyme-mediated prodrug activation, highlighting their strengths and weaknesses. This can add depth to the analysis.	

PART 2:

	Reviewer's comment	Author's comment(if agreed with 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 details)	

Reviewer Details:

Name:	Ayes Chinmay
Department, University & Country	Siksha 'O' Anusandhan Deemed to be University, India