

**Review Form 1.7**

Journal Name:	<b>Asian Journal of Advanced Research and Reports</b>
Manuscript Number:	<b>Ms_AJARR_116501</b>
Title of the Manuscript:	<b>EPIGENETICS: TARGETED THERAPIES FOR CANCER TREATMENT</b>
Type of the Article	

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**PART 1: Review Comments**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<p><b>Compulsory</b> REVISION comments</p> <p><b>1. Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</p> <p><b>2. Is the title of the article suitable?</b> (If not please suggest an alternative title)</p> <p><b>3. Is the abstract of the article comprehensive?</b></p> <p><b>4. Are subsections and structure of the manuscript appropriate?</b></p> <p><b>5. Do you think the manuscript is scientifically correct?</b></p>	<p>Authors have done an excellent job summarising epigenetic modifier's role ad drivers in oncology. This is a rising and important topic and authors outline the epigenetic mechanisms in cancer cell growth and cell replication and their potential for targeted therapies.</p> <p>Title is appropriate- some alternatives could be "Role of Epigenetics in Cancer and Targeted Therapies for Oncologic Treatments"</p> <p>Abstract is overall well written. Some suggestions: Avoid repetitive sentences that mean the same- for example: Owing to their malleability and vulnerability to outside factors, epigenetic modifiers are becoming intriguing targets for a number of cancer treatments. And The pervasive dysregulation and malleability of epigenetic Changes make cancer cells more susceptible to therapeutic therapies.</p> <p>The aforementioned initiatives to realize the potential of epigenetic medicines for efficient cancer treatment are summed up in this review. And Here, we provide an overview of the epigenetic medications under clinical research, emphasizing their advantages and disadvantages.</p> <p>Yes.</p> <p>Yes. Overall, very well written. Some suggestions in manuscript: 1. I would suggest clear stating definition of "what is epigenetics" and also mention- "epigenetic mechanisms govern gene expression independently of DNA sequence alterations. Two prevalent types of epigenetic modifications include DNA methylation and histone alterations." These points are mentioned under the heading role of epigenetics and under mechanism section- but its also important to clearly state two notable kinds of epigenetic mechanisms before describing them- for clear flow for the reader.</p> <p>2. I would suggest including some more details under role of epigenetics in cancer development- for example, how does DNA methylation occur- what are some errors that lead to cancer development, such as DNTMT3A, TET2, IDH1/2 mutations occur in DNA methylation that leads to MDS, AML and premalignant conditions such as clonal cytopenias of undetermined significance.</p> <p>Then some examples of histone modifications: such as aberrant expression of histone deacetylases are common in hematologic malignancies, and therefore drugs such as vorinostat are used in T cell lymphoma</p> <p>Describing these upfront would help flow to the next subsections where authors talk about importance of epigenetics targeted therapies and mechanisms of therapies. The above could be included under subtopic mechanism of epigenetic modifications.</p>	

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<p><b>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></p> <p><b><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></b></p>	<p>Alternatively, authors could move the sub headings mechanisms of epigenetic modifications before talking about importance of epigenetics targeted therapies and epigenetics targeted aptamers section for better flow.</p> <p>Yes. Some additional references could be:</p> <p>DiNardo CD, Cortes JE. Mutations in AML: prognostic and therapeutic implications. <i>Hematology (Am Soc Hematol Educ Program)</i>. 2016;2016(1):348-355.</p> <p>Vobugari, N., Heuston, C., &amp; Lai, C. (2022). Clonal cytopenias of undetermined significance: Potential predictor of myeloid malignancies. <i>Clin Adv Hematol Oncol</i>, 20(6), 375-383.</p> <p>I talked a lot about CCUS that is a precancerous condition for MDS and AML- and role of DNA methylation mutations such as DNMT3A, TET2 etc- can use as reference if authors would like.</p>	
<p><b><u>Minor</u> REVISION comments</b></p> <p><b>1. Is language/English quality of the article suitable for scholarly communications?</b></p>	<p>Further improvements in writing style could be made.</p> <p>Few spell errors: In 4<sup>th</sup> sentence, instead of throughout the world, could say” globally” Keywords: heritable. Fig 1: epigenetic 9. Challenges Conclusion section: few spelling errors such as epigenetic, ineffectiveness.</p>	
<p><b><u>Optional/General</u> comments</b></p>		

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<p><b>Are there ethical issues in this manuscript?</b></p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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