ISSN: 2320-5407
International Journal of Advanced Research
Publisher's Name: Jana Publication and Research LLP
www.journalijar.com
ISSN NO. 2320-5407

REVIEWER'S REPORT

Manuscript No.: IJAR- 51528 Date: 12/05/2025

Title: *Future of gene therapy related to proper treatment of cardiovascular diseases*

Recommendation:
✓ Accept as it is .....
Accept after minor revision.....
Accept after major revision .....
Do not accept (*Reasons below*) .....

Rating	Excel.	Good	Fair	Poor
Originality		✓		
Techn. Quality		✓		
Clarity		✓		
Significance	✓			

Reviewer Name: Dr. S. K. Nath Date: 13/05/2025

Reviewer's Comment for Publication:
This review effectively underscores the transformative potential of gene therapy in the treatment of cardiovascular diseases. It offers a compelling narrative on the advances in genetic engineering tools like CRISPR-Cas9 and their promise in correcting genetic abnormalities underlying CVDs. While promising, it also realistically acknowledges existing challenges, such as delivery efficiency, off-target effects, ethical issues, and the need for rigorous clinical validation. Overall, it advocates for continued multidisciplinary research to realize the full potential of gene therapy, aiming to shift from symptom management to root-cause correction, ultimately improving patient outcomes and transforming cardiovascular medicine.

Reviewer's Comment / Report

Strengths:

- **Comprehensive Overview:** The paper provides a detailed discussion on the significance of cardiovascular diseases (CVDs) globally, highlighting their impact and the limitations of current treatments.
- **Focus on Gene Therapy:** It thoroughly explains the principles, history, and technological advancements in gene therapy, emphasizing its potential in CVD management.
- **Inclusion of Current Research and Future Perspectives:** The paper discusses recent developments such as CRISPR-Cas9 technology, precision medicine, and gene editing techniques. It also identifies challenges and areas needing further research, making it forward-looking.
- **Interdisciplinary Approach:** Combines insights from molecular medicine, genetics, and clinical research, illustrating the multidisciplinary nature of developing gene therapies.

Weaknesses:

- **Limited Clinical Trial Data:** The review largely focuses on theoretical and preclinical aspects without detailed discussion of ongoing or completed clinical trials, which are crucial for assessing real-world applicability.
- **Ethical Considerations Briefly Mentioned:** While ethical concerns regarding gene editing are alluded to, the paper lacks an in-depth analysis of the ethical, regulatory, and social implications.
- **Limited Discussion on Delivery Mechanisms:** Although advancing delivery methods are acknowledged, the paper could benefit from a more detailed examination of current challenges and innovations in gene delivery systems.
- **Absence of Quantitative Data:** The review would be strengthened by including specific data or statistics demonstrating the efficacy or potential of gene therapy in CVD treatment.