Peer-Review Report

Commentary on "A Gene Therapy for Hereditary Nonpolyposis Colorectal Cancer using CRISPR-Cas9 Nickase (Preprint)"

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Related Article:

Preprint (bioRxiv) <u>https://www.biorxiv.org/content/10.1101/2023.06.20.545835v1</u> (*JMIRx Bio 2023;1:e54743*) doi: <u>10.2196/54743</u>

KEYWORDS

gene; gene therapy; hereditary; colorectal cancer; cancer; nonpolyposis; inherited disorder; genetic mutation; DNA; colectomy; disease progression; prevention; tumor; quality of life

This is a peer-review report submitted for the preprint "A Gene Therapy for Hereditary Nonpolyposis Colorectal Cancer using CRISPR-Cas9 Nickase.". The authors of that preprint declined to address the peer-reviewer comments and did not proceed to resubmit a Version-of-Record for publication and curation in JMIRx-Bio. In these cases JMIRx-branded journals acting as overlay journals for preprints may publish peer-reviews as commentaries.

Round 1 Review

General Comments

This paper [1] investigates a gene therapy for hereditary nonpolyposis colorectal cancer using clustered regularly interspaced short palindromic repeats (CRISPR)–Cas9 nickase. Overall, it is a good exploratory article, with a background of the combination of CRISPR–Cas9 nickase and gene therapy for hereditary nonpolyposis colorectal cancer, and the research idea is special and novel, but the methodology is only a survey, and the understanding may not bring enough depth to the study. You can try to apply the results of the survey to improve the specific utility and multipurpose use of the study's cell phone app, which can increase the significance of the study.

Specific Comments

Major Comments

1. In terms of the starting point of the study, some of the text in Figure 1 is too small, and even partially obscured by the graphic, to be readable.

2. Figure 2 is too similar in the color scheme of the individual bars, which makes readability and visibility less desirable.

3. Figure 3 is, theoretically, not supposed to be a drawn graph but an actual electrophoretic run of the gel by DNA—a real strip chart trajectory.

4. The compiling, analyzing, and drawing of the work is well done, and it is a very good report. If you can add your own research, revised ideas and approaches to data, and details, you can definitely improve the innovation of the article.

Conflicts of Interest

None declared.

Editorial Notice

The authors of the preprint under review declined the opportunity to revise the preprint in response to the feedback in the peer reviews and publish it in the journal *JMIRx Bio*. The editors thank the peer reviewers for providing their feedback on this preprint.

Reference

 Kannan S, Man JJ. A Gene Therapy for Hereditary Nonpolyposis Colorectal Cancer using CRISPR-Cas9 Nickase. bioRxiv. [FREE Full text] [doi: 10.1101/2023.06.20.545835]

Abbreviations

CRISPR: clustered regularly interspaced short palindromic repeats



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