

## **Reviewer #1:**

### **Specific Comments to Authors:**

This is a very interesting review paper to summarize the current tracking methods for MSC-based cancer therapies. The reviewer has the following minor comments to revise the manuscript.

1) The running title can be changed into “Molecular imaging: tracking for MSC-based cancer treatment”.

**Response:** Thank you for your comment. As per your suggestion, we have changed the running title to ‘Molecular imaging: Tracking for MSC-based cancer treatment’.

2) Please reduce the number of key words.

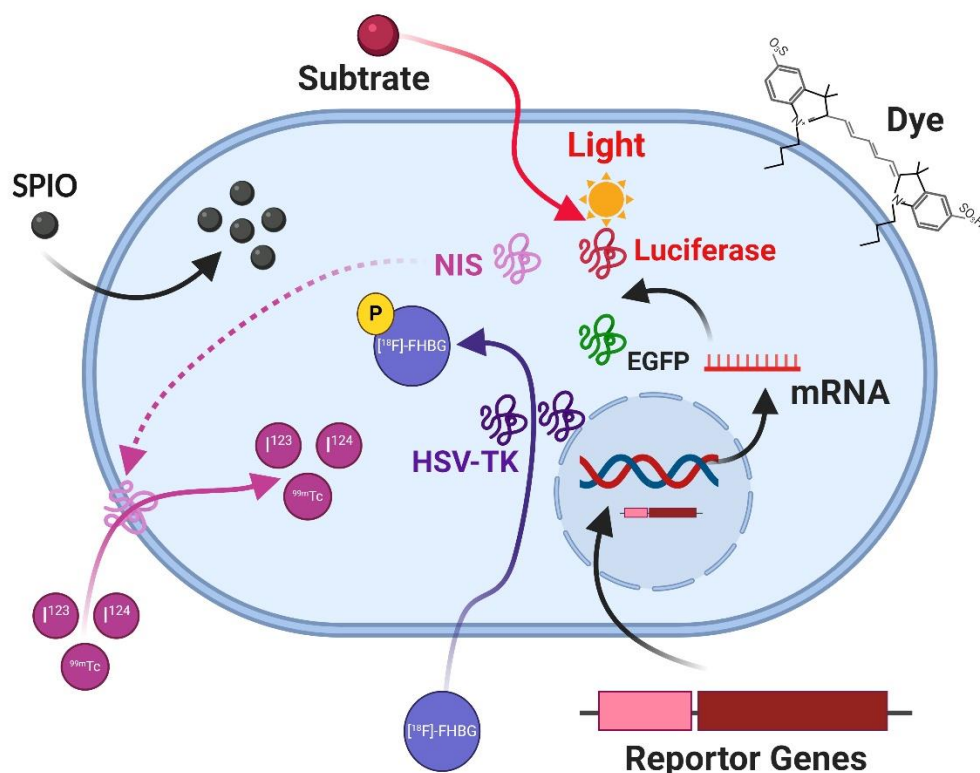
**Response:** Thank you for your comment. As per your suggestion, we have reduced the number of keywords.

3) Please do not always list the name of the authors when the reference is cited; so many names were listed in the text which will make the manuscript unreadable. Please rewrite all the sentences extensively.

**Response:** Thank you for your comment. As per your suggestion, We have removed the author names from the manuscript and extensively changed the sentence structure.

4) If possible, please add one more combined image to illustrate the MSC after labeling which will make the manuscript more attractive.

**Response:** Thank you for your comment. As per your suggestion, we have added a new figure summarizing the approaches used to label MSCs.



### **Science editor:**

1 Scientific quality: The manuscript describes a review of the noninvasive in vivo cell tracking using molecular imaging. The topic is within the scope of the WJSC.

(1) Classification: Grade B;

(2) Summary of the Peer-Review Report: The authors reported a very interesting review paper to summarize the current tracking methods for MSC-based cancer therapies. However, the authors need to add one more combined image to illustrate the MSC after labeling. The questions raised by the reviewer should be answered; and

(3) Format: There is 1 table and 2 figures. A total of 104 references are cited, including 15 references published in the last 3 years. There are no self-citations. 2 Language evaluation: Classification: Grade B. A language editing certificate issued by enago was provided. 3 Academic norms and rules: The authors provided the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement. No academic misconduct was found in the CrossCheck detection and Bing search.

4 Supplementary comments: This is an invited manuscript. The study was supported by National Research Foundation of Korea. The topic has not previously been published in the WJSC.

5 Issues raised:

(1) The “Author Contributions” section is missing. Please provide the author contributions;

**Response:** The ‘Author Contributions’ section has been added below the conclusion section in the manuscript.

(2) The authors did not provide the approved grant application form(s). Please upload the approved grant application form(s) or funding agency copy of any approval document(s);

**Response:** Thank you for your comment. We have included funding agency copy of approval documents.

(3) The authors did not provide original pictures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor;

**Response:** Thank you for your comment. Since the figures were created with Biorender.com, we could not provide them in PowerPoint. They can be downloaded in a JPG, PNG or pdf format directly from Biorender.com.

(4) PMID and DOI numbers are missing in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please revise throughout; and

**Response:** Thank you for your comment. We have modified the format of the references as per your suggestion.

(5) The references’ number and the square bracket totally should be superscript.

**Response:** Thank you for your comment. We have modified the format of the references as per your suggestion.

6 Re-Review: Required.

7 Recommendation: Conditional acceptance.