Response to reviewers and editors:

Manuscript NO: 79109

Reviewer #1 (Code: 05817547)

Scientific Quality: *Grade B (Very good)*

Language Quality: *Grade B (Minor language polishing)*

Conclusion: Accept (General priority)

Specific Comments to Authors: In this manuscript, the authors have evaluated "Folate receptor-targeted near-infrared photodynamic therapy for folate receptor-overexpressing tumors" Overall, this Manuscript provides valuable and valid data. I do not see any major issues in this Manuscript; the Manuscript can only be accepted after minor revision. A few minor issues need to be addressed, as pointed below: 1-The manuscript must be carefully proofread for grammar, spelling, and punctuation issues.

Response to reviewer #1:

We would like to express our sincere gratitude for your careful review of our manuscript and constructive comments.

According to the reviewer's suggestion, the whole manuscript has been proofread for grammar, spelling, and punctuation issues by a native language professional. We also provide a language editing certificate letter by a professional English language editing company (Editage).

Reviewer #2 (Code: 06254455)

Scientific Quality: *Grade B (Very good)*

Language Quality: *Grade B (Minor language polishing)*

Conclusion: *Accept* (*General priority*)

Specific Comments to Authors: This manuscript aimed to evaluate the photodynamic therapeutic efficacy of FolateSiR-1 in preclinical cancer model and the cell death mode induced by FolateSiR-1-based PDT. It is an interesting and well written article; however, I suggest trying to condense the discussion by reducing the amount discussed about the findings (it's a repeat of the "results" part) and the author should use references for the raised claims and hypothesis (some of the claims have no references and cannot be considered scientific.)

Response to reviewer #2:

We greatly appreciate the reviewer's effort for carefully reading our manuscript and giving valuable comments and suggestions.

We agree with the reviewer's advice to condense the discussion by reducing the amount of discussion of the findings. Thus, we have amended the manuscript by reducing the repeat of the "results" part in the discussion section.

In Page 17, Line 19, we deleted "Fluorescence imaging revealed that".

In Page 17, Line 28, we deleted "Next, the distribution and tumor accumulation of FolateSiR-1 was examined by fluorescence imaging in the tumor-bearing mice.".

In Page 20 Line 13, we deleted "due to DNA degradation".

In Page 20 Line 13, we deleted "with a glossy homogenous appearance".

The reviewer suggested that references should be used for the raised claims and hypothesis. We agree with reviewer's suggestion and have added some references where appropriate.

In Page 6, Line 9, we added reference 2 (2 Algorri JF, Ochoa M, Roldán-Varona P, Rodríguez-Cobo L, López-Higuera JM. Photodynamic Therapy: A Compendium of Latest Reviews. Cancers (Basel) 2021; **13**(17): 4447 [PMID: 34503255 DOI: 10.3390/cancers13174447]).

In Page 6, Line 15, we added reference 5 (5 Mroz P, Yaroslavsky A, Kharkwal GB, Hamblin MR. Cell death pathways in photodynamic therapy of cancer. Cancers (Basel). 2011; 3(2): 2516-39 [PMID: 23914299 DOI: 10.3390/cancers3022516]).

In Page 6, Line 18, we added reference 3 (3 Agostinis P, Berg K, Cengel KA, Foster TH, Girotti AW, Gollnick SO, Hahn SM, Hamblin MR, Juzeniene A, Kessel D, Korbelik M, Moan J, Mroz P, Nowis D, Piette J, Wilson BC, Golab J. Photodynamic therapy of cancer: An update. CA Cancer J Clin 2011; 61(4): 250-281 [PMID: 21617154 DOI: 10.3322/caac.20114].

In Page 7, Line 19, we added reference 19 (19 Stallivieri A, Colombeau L, Jetpisbayeva G, Moussaron A, Myrzakhmetov B, Arnoux P, Acherar S, Vanderesse R, Frochot C.Mu JH, Xiao HL, Li DH. Folic acid conjugates with photosensitizers for cancer targeting in photodynamic therapy: Synthesis and photophysical properties. Bioorg Med Chem 2017; **25**(1):1-10 [PMID: 27769669 DOI: 10.1016/j.bmc.2016.10.004]).

In addition, English has been revised by a native language professional. We also provide a language editing certificate letter by a professional English language editing company (Editage).

Response to Editorial Office's comments and suggestions

We greatly appreciate the efforts of the Science editor and Company Editor-in-Chief in thoroughly reading our manuscript and for giving valuable suggestions.

Science editor's comment:

The manuscript has been peer-reviewed, and it's ready for the first decision.

Language Quality: Grade B (Minor language polishing)

Scientific Quality: Grade B (Very good)

Response to Science editor:

According to Science editor's suggestion, the manuscript has been revised by a professional English language editing company (Editage).

Company editor-in-Chief's comment: I recommend the manuscript to be published in the World Journal of Clinical Oncology. Before final acceptance, when revising the manuscript, the author must supplement and improve the highlights of the latest cuttingedge research results, thereby further improving the content of the manuscript. To this end, authors are advised to apply a new tool, the Reference Citation Analysis (RCA). RCA is an artificial intelligence technology-based open multidisciplinary citation analysis database. In it, upon obtaining search results from the keywords entered by the author, "Impact Index Per Article" under "Ranked by" should be selected to find the latest highlight articles, which can then be used to further improve an article under preparation/peer-review/revision. Please visit our RCA database for more information at: https://www.referencecitationanalysis.com/.

Response to Company editor-in-Chief:

As sincerely thank the Company editor-in-Chief for recommending to publish our manuscript in the World Journal of Clinical Oncology. As kindly suggested by the Company editor-in-Chief, we applied RCA and supplement the manuscript with the highlights of the latest cutting-edge research to further improve the article. We amended and supplemented some relevant points in the introduction section of the revised manuscript (Page 7, Line 17 - Page 8, Line 11). We also included some new references (Ref #21, #22, #25, #26, #27, #28, and #29) and replaced references #21, #22, and #29 with newly updated references.