

Response Letter:

Authors' responses are marked **blue**. Corrections as per the Reviewers' comments are marked **red** in the revised manuscript.

Author: We would like to thank the Editor and the Reviewers for their valuable comments and suggestions to improve the quality and presentation of this work

Reviewer No.: 0058381

From the clinical point of view (and for readers who are not directly involved in the subject) some more concrete information on clinical implications would be desirable - please provide some more comments on clinical perspectives.

Authors: We provided more information on clinical perspectives of gold nanoparticle in radiotherapy in the Introduction section. Four more references [14-17] were added.

1. **Song L**, Falzone N, Vallis KA. EGF-coated gold nanoparticles provide an efficient nano-scale delivery system for the molecular radiotherapy of EGFR-positive cancer. *Int J Radiat Biol* 2016;1-8 [PMID: 26999580 DOI: 10.3109/09553002.2016.1145360]
2. **Li W**, Zhao X, Du B, Li X, Liu S, Yang XY, Ding H, Yang W, Pan F, Wu X, Qin L, Pan Y. Gold nanoparticle-mediated targeted delivery of recombinant human endostatin normalizes tumour vasculature and improves cancer therapy. *Sci Rep* 2016;6:30619 [PMID: 27470938 DOI: 10.1038/srep30619]
3. **Chattopadhyay N**, Cai Z, Kwon YL, Lechtman E, Pignol JP, Reilly RM. Molecularly targeted gold nanoparticles enhance the radiation response of breast cancer cells and tumour xenografts to x-radiation. *Breast Cancer Res Treat* 2013;137:81-91 [PMID: 23160926 DOI: 10.1007/s10549-012-2338-4]
4. **Butterworth KT**, Nicol JR, Ghita M, Rosa S, Chaudhary P, McGarry CK, McCarthy HO, Jimenez-Sanchez G, Bazzi R, Roux S, Tillement O, Coulter JA, Prise KM. Preclinical evaluation of gold-DTD TPA nanoparticles as theranostic agents in prostate cancer radiotherapy. *Nanomedicine* 2016;22:2035-2047 [PMID: 27463088 DOI: 10.2217/nnm-2016-0062]

Reviewer No.: 2826268

I would like to see the revised paper with the revising below - Give quantitative information in abstract - improve English.

Authors: We provided quantitative information in the Abstract as highlighted in **red** in the revised manuscript. Moreover, the English was edited by Daniel Markel in the University of Toronto for language polishing.