Reviewer's report

Title: Radiosensitization in prostate cancer: mechanisms and targets

Version: 1 Date: 19 November 2012

Reviewer: Satoshi Anai

Reviewer's report:

Minor Essential Revisions

Authors clearly overviewed radiosensitization in prostate cancer and demonstrated the detail from basic science to clinical availability widely. However, there are many typos and grammatical errors in this manuscript. Also, 2 figures they showed look immature. Once they correct typos and improve figures, this manuscript should be accepted.

Page 4

more pronounced in cells that are not effectively repair DNA damage (18-20). “are” should be removed.

Page 6

proteins Rad9, Rad1, and Hus1 (34). This complex is thought to be more involved in
“space” should be placed between “and” and “Hus1”
and Nbs1, and it is thought to be more specific to double-strand DNA damage and
“space” should be placed between “and” and “Nbs1”
homologous repair (35, 37). These complexes dock on fractured DNA or near the site of
“dock” should be altered to the passive voice.

Page 7

cycle transitions until the integrity of the DNA is ensured assured (42-45). Cells respond
“assured” should be removed.

Page 8

which after mitosis is the next most sensitive phase in the cell cycle. Multiple pathways
“after mitosis” should be altered to “post mitosis”.

phosphorylation. The ATM/CDC25A pathway is also important here
because cdc25A is
“space” should be placed placed between “because” and “cdc25A”.

Page 11
p53 expression and function in tumor cell has an important role in the cellular response to
“space” should be placed.
DNA damaging agents, facilitating cell cycle arrest, or death (87). While overexpression
“damaging agents” should be altered to “damage”
Furthermore, with combination therapy, the number of apoptotic cells increased
7-fold in
“space” should be placed.

Page 12
through G1 checkpoint for repair they pass directly to mitosis with DNA lesions,
causing
“comma” should be placed between “repair” and “they”.
essential for DNA repair processes (93) but when it is hyperactivated causes NAD and
“when it is hyperactivated” should be altered to “hyperactivation of PARP1”
ATP depletions, leading in μ-calpain activation, a unique caspase-independent
“comma” should be replaced to “and”.

Page 17
cancer development, progression, and resistance to conventional therapy. One
“space” should be placed.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
'I declare that I have no competing interests'