

# Review of: "Amifostine Has Chemopreventive Effects in a Mouse Skin Carcinogenesis Model"

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**Potential competing interests:** No potential competing interests to declare.

The FDA has approved Amifostine for several cases, such as reducing toxicity due to radiation and preventing kidney nephrotoxicity in cisplatin administration. However, its use often causes side effects, so it is not preferred. It is because Amifostine can scavenge free radicals and reduce the number of free radicals to protect cells. Amifostine can stimulate DNA repair and prevent DNA mutations. In addition, Amifostine also inhibits inflammation. The ability of Amifostine to reduce free radicals, repair DNA and reduce inflammation has the potential of Amifostine as a chemopreventive which is an exciting idea for this study.

The author conveyed that this article was prepared based on the ARRIVE standard. However, several things have yet to be reported, such as why the number of experimental animals was more used, how to calculate the sample size in this study, and how the experimental animals were randomized. It is also better to report who the reader is for histological and whether blinding is.

There are too many mouse images. At the same time, the author can replace the histopathological picture with a clearer one. I cannot entirely agree with the researcher's conclusion that "Amifostine could show partial prevention in the radiation carcinogenesis model" because this study did not use a radiation model but only chemical carcinogenesis models. Overall this study is exciting and provides information regarding the effects of amifostine as chemopreventive.

Vijay K. Singh & Thomas M. Seed (2019) The efficacy and safety of amifostine for the acute radiation syndrome, Expert Opinion on Drug Safety, 18:11, 1077-1090, DOI: 10.1080/14740338.2019.1666104

Ha SS, Rubaina K, Lee CS, John V, Seetharamu N. Amifostine is a Nephro-Protectant in Patients Receiving Treatment with Cisplatin- Myth, Mystery or Matter-of-Fact?. J Nephrol Sci.2021;3(1):4-8