9. **Strengths**

- This study provides an insight into the working of herbal radioprotectors in animal models. Unlike the synthetic compounds, plants and plant based products are preferable due to being nontoxic, inexpensive and harmless to humans.

- *Psidium guajava* and *Persea americana* which provide us with edible fruits and used as medicinal plants are freely available all over the world. Our study has provided information on the LD$_{50/30}$ of X-rays through LINAC Accelerator and the DRF of both plants. Therefore it is worthwhile to conduct detailed studies of these plants in order to explore their maximum potential in human radiation protection.

- Radioprotective effects of *Psidium guajava* and *Persea americana* are predominant only when administered prior to radiation treatment and not post radiation treatment. Therefore prospective studies related to radioprotection can avoid post treatment animal groups.

- The source used for radiating animals was same as that which is being used in radiotherapy for cancer patients. Therefore an adverse effect of radiation seen in cancer patients is mimicked in animal model in our study and as a result it is easier to extrapolate the findings in clinical trials.
Limitations

- The phytoconstituents of crude extracts need to be evaluated systematically for the protective effect. Lead molecule has not been identified in this study.

- Peripheral blood lymphocytes which are the major targets for radiation induced damage could not be used for studying the antioxidants.

- Studies on mitochondria which is an important source of free radicals, was not performed.

- Any possible hepatotoxic or nephrotoxic effects of the plant extracts have not been performed in our study.