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A cage card indicating the irradiation treatment should be placed in front of the cage card holder to communicate with husbandry staff. Do not remove this card for at least two weeks following irradiation.

Prior to and following irradiation, mice must be housed in autoclaved caging with sterile water. These conditions decrease the possibility of introducing pathogenic or opportunistic environmental bacteria during the two-week period following irradiation. Ideally, these conditions will be maintained beyond the first two weeks.

- o Water bottles should be changed twice weekly to avoid contamination.

Mice should only be handled within a HEPA-filtered biological safety cabinet or cage changing station. All materials that contact the mice must be sterile or cleaned with 0.5% Accelerated Hydrogen Peroxide (e.g., containers used for weighing mice). Gloved hands should be moistened with 0.5% Accelerated Hydrogen Peroxide for a minute prior to handling mice or interior cage components and should remain moist throughout handling.

Diet gel or moistened chow can stimulate appetite and help maintain hydration during recovery and should be offered starting 2 to 3 days prior to irradiation and through the two weeks following. Introduction prior to irradiation will help prevent food aversion associated with radiation sickness.

- o If using moistened chow, sterile water should be used
- o This supplemental feed should be placed in sterile Petrie dishes and should be replenished daily, or more often if soiled or consumed

Mice should be monitored at least once daily by lab personnel for the first 14 days, including weekends. Efforts should be made to enter the cage as little as possible, but as often as needed to replenish food, update weights, and provide other supportive care.

- o Starting the day following irradiation, using the table below, a 

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. If the score is 6 or higher, a veterinarian should be notified, and the score should be updated daily. A score of 12 is grounds for immediate humane killing, as death is imminent.

A baseline, pre-irradiation body weight must be recorded on the corresponding cage card. The weight of each mouse must be updated every other day following irradiation and noted under the baseline weight. Weight loss of 15-20% is justification for euthanasia.









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Date	New Version
October 30 <sup>th</sup> , 2024	Protocol Created