



**Guidelines for the Use of Estrogen Inhibitors in Rodents**  
Occupational Health and Safety & Animal Care and Veterinary Services  
Approved: Biohazards Subcommittee: September, 2009

**Personal Protective Equipment:**

- Safety glasses
- Gloves
- Labcoat or equivalent required, Tyvek suit recommended

**Before Using the Drug(s):**

All faculty, staff or students who may come in contact with the drug itself or contaminated materials such as bedding and lab waste, must read the Material Safety Data Sheet(s) and follow the general precautions found in the Laboratory Health and Safety Manual for General Laboratory Practices found at:  
[http://www.uwo.ca/humanresources/facultystaff/h\\_and\\_s/lab\\_safety/lab\\_safety\\_idx.htm](http://www.uwo.ca/humanresources/facultystaff/h_and_s/lab_safety/lab_safety_idx.htm).

Many of these drugs have potential effects on reproductive health or an unborn child. Hazard Communication Forms should be updated to reflect the use of these drugs, for more information see <http://www.wph.uwo.ca/>. If you have questions about your health, please contact Workplace Health at extension 85471.

**Preparing the Drug(s):**

Prepare the drug as per the label instructions. Use a fume hood to prepare/mix the drug and to handle the powder form of the drug.

**Procedures:**

Induction of an estrogen inhibitor can be achieved by IP, oral, or topical administration. For IP and oral routes, it should be dissolved in corn oil or sunflower oil at 10 mg/ml; for topical administration, it should be dissolved in ethanol/DMSO or emollient cream. For more information on the animals' tolerance of estrogen inhibitor(s) and appropriate route(s) of administration, please contact Animal Care and Veterinary Services.

The administration of the liquid form of an estrogen inhibitor can be performed outside of a fume hood. If there is a Level 2 or above hazard involved along with the estrogen inhibitor, a certified class 2 biological safety cabinet must be used. For more information on biosafety containment levels, please see [www.uwo.ca/humanresources/biosafety](http://www.uwo.ca/humanresources/biosafety). If you have questions about these procedures, please contact the Biosafety Officer at extension 81135.

After administration of the estrogen inhibitor, the mice should be placed in a clean cage with a full size identifier cage card placed in front of the regular cage card, which clearly states

- CHEMICAL HAZARD,
- relevant lab and contact name,
- date of drug injection/administration and
- Special handling until date (5 days after injections).

The cages must be opened in the biological safety cabinet or fumehood to clean cages. All dirty bedding must be disposed by incineration. Bedding must be scraped clean from the cage so none is transferred to the cage wash area. All contaminated bedding, etc. must be disposed as described above. If the animals are removed from the facility for experiments, all handling of the cages and waste must be done as described above.

After administration of an estrogen inhibitor, all surfaces must be washed immediately. All contaminated disposable materials, such as feeding tubes, should be disposed of in biohazard bags.

For at least 5 days following the administration of an estrogen inhibitor, animal caretakers should handle relevant animals and cages as described above. Once dirty bedding is removed from cages that housed mice given the drug, the cages themselves do not require further special handling. Dead animals that have been administered an estrogen inhibitor should be discarded by incineration.

**Disposal:**

- Incinerate all used bedding, feces, and animals that have been administered an estrogen inhibitor. For more information on disposal, please see the website:  
[http://www.uwo.ca/humanresources/facultystaff/h\\_and\\_s/enviromental\\_prog/environmental\\_idx.htm](http://www.uwo.ca/humanresources/facultystaff/h_and_s/enviromental_prog/environmental_idx.htm)

**Special Note for Tamoxifen:**

Please note that tamoxifen metabolism is hepatic, with excretion of metabolites largely restricted to the feces. Metabolite excretion continues for 2 days post-administration; therefore, care must be taken in the disposal of dirty bedding for 72 hours after administration. Once the 5 day period after the last injection of tamoxifen has past, animals should be moved to clean cages. After this period, no special handling of the bedding, cages or animals is required.