

## Use of Tamoxifen

### Purpose:

To provide guidance for the use of Tamoxifen in the laboratory and animal facility environment. Tamoxifen is used at UW-Madison in animal research for a variety of research applications.

### Precautions:

The following information can be used to complete the Safety section of your animal protocol.

1. Chemical hazard agents – (Identify the category of the chemical): (*Select the following*)
  - Carcinogen
  - Reproductive Hazard/Teratogen
  - Toxicant/Toxic Agent
2. Containment preparation – (Containment equipment required for the preparation of the chemical): (*Select one of the following*)
  - Fume Hood
  - OR**
  - Ducted Biosafety Cabinet (BSC)
3. Containment animals – (Containment equipment required for chemical administration and handling animals after exposure to the chemical): (*Select one of the following*)
  - Fume Hood
  - OR**
  - Ducted Biosafety Cabinet (BSC)

**NOTE:** For Rodents: Microisolator or other containment type housing caging is recommended.
4. PPE needed - (for handling live animals, carcasses or animal waste/dirty bedding): (*Select all of the following*)
  - Exam gloves – nitrile
  - Safety glasses/goggles
  - Lab coat or disposable gown
5. Waste Disposal: (disposal of animal waste/dirty bedding from animals after exposure to the chemical) (*Select both options and include additional information for Other*)

- Bag animal waste/dirty bedding and place sealed bag in secondary container and place secondary container in regular trash.
- Other: Signage is required on each individual cage containing the chemical health hazard symbol and "Agent, End date and Disposal method". Signs are removed when special handling time has ended. \*Cage signage available at [www.ehs.wisc.edu](http://www.ehs.wisc.edu)

6. Carcass disposal: (*Select the following*)

- Pick up by EH&S for incineration.

7. Chemical human risk: (*Add the following*)

- Exposure to tamoxifen or tamoxifen metabolites has been associated with an increased risk of cancer. Tamoxifen is considered a genotoxin also. Prenatal, neonatal, and postnatal exposure to tamoxifen could lead to varying levels of reproductive toxicity. Pregnant and lactating women should avoid exposure to tamoxifen and animals that have been administered tamoxifen. Primary routes of occupational exposure to tamoxifen include: aerosol exposure, ingestion, accidental injection, and tissue/transplacental absorption.

**Additional information:**

If a respirator is needed Occupational Health can also be consulted as to the appropriateness of using an N95 when higher respiratory protection is recommended. Note: personnel must receive medical clearance and fit testing for respirator use.

References:

"Chemical Safety Practices Recommendations Tamoxifen" NIH November 2014  
[https://ncifrederick.cancer.gov/ehs/Safety/Media/Documents/CSPR\\_Tamoxifen.pdf](https://ncifrederick.cancer.gov/ehs/Safety/Media/Documents/CSPR_Tamoxifen.pdf)

"Tamoxifen SDS"

<http://www.sigmaaldrich.com/catalog/product/sigma/t5648?lang=en&region=US>