

Institutional Biological Safety Committee Policy on Animal Experiments Involving Viral Vectors with Human Tropism Revision Date: 09/07/17

PURPOSE: This policy applies to animal experiments involving viral vectors with human tropism at the University of Cincinnati, Laboratory Animal and Medical Services (LAMS) and any IACUC approved satellite area. This policy aims to determine the type of containment for animals receiving viral vectors in order to minimize the risks of exposure to animal handlers. This policy also applies to animals receiving cells which have been recently transduced with those vectors (up to 72 hrs from the *in vitro* transduction).

IMPLEMENTATION: The Biological Safety Office (BSOf) and LAMS are directed to implement this policy upon approval by the IBC. All necessary changes must return to the IBC for approval.

PROCEDURES

- The following activities must be performed inside IBC-approved containment equipment (e.g. Biosafety Cabinet(BSC)):
 - a) Transfection and harvesting of viral vectors;
 - b) Preparation of inoculum (e.g. dilutions, syringe loading);
 - c) Administration of viral vector or recently transduced cells into the animal (by any route*).
- After vector or transduced cell administration, the animal injection site must be properly cleansed with 70% ethanol and animal returned to the cage.
- Animals receiving viral vectors or recently transduced cells must be housed in containment caging and handled within a BSC for a minimum of 72 hrs.
- Waste must be disposed of as biohazardous for a period of at least 72 hrs.
 After the minimum 72 hrs period and first cage change, animals may return to standard housing.

*Some experimental procedures, including stereotactic injections, may preclude the use of a BSC. Therefore, an alternative SOP must be followed to minimize the risk of exposure when these procedures are performed outside of a BSC.

REFERENCES

- 1. Biosafety Considerations for Research with Lentiviral Vectors
- 2. Reuter J., Fang X., Ly C., Suter, K., Gibbs D. (October 2012) <u>Assessment of Hazard Risk Associated with the</u> <u>Intravenous Use of Viral Vectors in Rodents</u> Comparative Medicine Vol. 62, N°5