

STANDARD OPERATING PROCEDURE #420 ESTROUS CYCLE ASSESSMENT IN RODENTS

1. PURPOSE

This Standard Operating Procedure (SOP) describes procedures for the determination of estrous cycles in adult female mice and rats using vaginal smear cytology.

2. RESPONSIBILITY

Principal investigator (PI) and their research staff, veterinary care staff.

3. MATERIALS

- 3.1. Gauze
- 3.2. Sterile isotonic solution: 0.9% saline or phosphate buffered saline
- 3.3. Fine tip plastic pipettes, tip inner diameter 1mm

4.6.3. Metestrus:

- 4.6.3.4. Lasts approximately 21 hours
- 4.6.3.5. In this stage, there is a mix of cell types with a predominance of leucocytes (neutrophils) and a few nucleated epithelial and/or cornified squamous epithelial cells

4.6.4. Diestrus:

- 4.6.4.6. Lasts approximately 48-72 hours
- 4.6.4.7. This stage consists predominantly of leukocytes (neutrophils) and a few nucleated non-cornified epit