

Common Anatomic Measures of Mouse Developmental Pathology

Maternal Observations

- Periodic determination of maternal body weight

General Pathology of the Conceptus

- Total number of implantation sites and resorptions in uterus
- Numbers of live, dead, and malformed conceptuses (staged by developmental age)

Fetal Pathology (Near Term)

- Fetal gross examination
 - External features (at necropsy): body weight, crown-rump length, gender (ano-genital distance), malformations
 - Internal structures (in fixed fetuses): visceral malformations using Wilson's technique (multiple free hand cross sections of head and body)
 - Skeletal malformations (in unfixed fetuses stained with alizarin red S [labels bone] and Alcian blue [labels cartilage])
- Histopathology

Embryo Pathology (Early and Mid Gestation)

- Embryo gross examination (bright field stereomicroscopy): crown-rump length, external malformations, somite counts, etc.
- Histopathology