



Surgical Pre- and Postoperative Care

Preoperative Preparation

Prescreening process

1. Prior to surgery, each animal is examined for any abnormalities that would exclude its suitability for surgery.
2. The animal's weight is verified using an electronic balance and the appropriate anesthetic dose is calculated.

Animal preparation

1. The animal is anesthetized according to the species, age or weight.
2. Eye lubrication ointment is applied.
3. Analgesia is administered subcutaneously.
4. The operative site is shaved using electric clippers.
5. The animal is placed on an individual sterile field for aseptic preparation.
6. The surgical site is prepped with alternating applications of chlorhexidine scrub/solution and alcohol. This process is repeated twice.
7. If necessary, eye lubrication ointment is reapplied.
8. The animal is transported to the surgical hood and placed on the heated surgical field on a pre-positioned sterile drape.

Anesthesia

Ketamine/xylazine cocktail

Isoflurane gas anesthesia

- Any surgery that bypasses the liver (e.g., the Eck fistula (portal-caval) procedure)
- Per customer request
- Guinea pigs, hamsters, gerbils
- Obese strains
- Any rodent species over 100 days old
- Any animal over a specific weight:
 - Rats \geq 400 g
 - Mice \geq 35 g

Analgesia

Buprenorphine and carprofen are available for pre- and postoperative administration. The use of either or both is based upon the anticipated postoperative pain as related to the invasiveness of the procedure.

Analgesia may be altered with the approval of a Charles River Professional Services veterinarian. Surgeries wherein analgesia must be withheld require documentation of scientific necessity and internal IACUC approval.

Anticipated Post-Op Pain	Surgery (Day Of)	Post-Op (Days Following)
Minimal to Mild	Buprenorphine	As needed
Mild to Moderate	Buprenorphine and Carprofen	As needed
Moderate to Severe	Buprenorphine and Carprofen	Buprenorphine b.i.d. x 2 days
Moderate to Severe	Buprenorphine and Carprofen	Carprofen s.i.d. x 2 days

Antibiotics

- When perioperative antibiotics are required, enrofloxacin is the standard medication used.
- Telemetry procedures are the only surgeries that receive antibiotics as a part of the surgery protocol.
The standard regime for enrofloxacin is administration 30 minutes prior to surgery and continued dosing once a day for 2 additional days.
- Antibiotics may be requested by the customer for any of the procedures we perform.

Postoperative Care Recovery

1. Immediately following surgery, the animal is placed on an absorbent pad inside a heated, filter-topped recovery cage.
2. Animals are regularly observed by the operating surgeon or a trained technician until they are ambulatory. Once they have established their righting reflex and have recovered from anesthesia, they are moved to the holding area for postoperative management until shipping.
3. In the postoperative holding area, the animals are observed daily and observations are recorded until the animals are shipped.

IACUC

The Charles River Institutional Animal Care and Use Committee (IACUC) governs the entire surgical process, including all anesthesia, analgesia, animal preparation and any postoperative holding in Charles River facilities prior to shipment. Review of experimental protocols, authorization to order animals that are surgically modified from Charles River, and all aspects concerning the use of animals after they arrive at the institution are the responsibility of the receiving institution's IACUC.

Contact Us

For more information, visit www.criver.com/surgery. For specific surgery-related questions, please contact our technical experts at 1.877.CRIVER.1 (1.877.274.8371) or askcharlesriver@crl.com. To place an order or get a quote, contact our Customer Service Department at 1.800.LABRATS (1.800.522.7287).