



## Bile Duct Catheter

Surgery Code: BILECANN

The bile duct catheter is of benefit to preclinical or research studies as it allows for easy repeated access to the bile duct for bile collection and/or to the duodenum for dosing, without the need for anesthesia. This surgery is designed principally for pharmacologic studies, but may also be used for basic physiology studies where sampling from the bile duct and/or dosing to the duodenum is necessary.

### Animal Models

Typical selections are listed below; however, choices for strain, age and weight may be limited due to model anatomy and/or physiological conditions.

- Rats: male/female, any strain, weight  $\geq$  200 g
- Mice: male/female, CD-1<sup>®</sup> IGS only, weight  $\geq$  26 g

### Procedure Details

- Animals are fasted for at least 4 hours prior to surgery.
- **Perioperative care:** Please view our Pre- and Postoperative Care Sheet, which can be found at [www.criver.com/opcare](http://www.criver.com/opcare).
- **Housing:** The animals must be singly housed.
- **Diet:** No special diet is required.
- **Postoperative holding period:** At a minimum, post-op animals are held 2 days, with the majority of animals shipping within 3 days of surgery.
- **Maintenance:** Incision wound clips should be removed 7-10 days after surgery. Any wound clip used to secure a catheter needs to be replaced every 7-10 days. Catheters should be maintained following the Charles River Handling Instructions, which can be found at [www.criver.com/handling](http://www.criver.com/handling).

### Surgical Summary

#### Rat Procedure

One end of the catheter is inserted into the bile duct while the opposite end is inserted into the duodenum. The catheter is looped subcutaneously around the animal's back and exteriorized in the scapular region. The exteriorized portion of the catheter is bisected to verify bile flow and a 21-gauge connector is used to reconnect the catheter.

#### Mouse Procedure

One end of the catheter is inserted into the bile duct while the opposite end is inserted into the duodenum. Once the catheter is in place, the gallbladder is then removed. The catheter is looped subcutaneously around the animal's back and exteriorized in the scapular region. Sutures are applied at the scapular exit site to secure the catheter in place. An additional suture is placed midway between the scapular incisions to secure the catheter to the skin.

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## 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 the 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](http://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](mailto:askcharlesriver@crl.com). To place an order or get a quote, contact our Customer Service Department at 1.800.LABRATS (1.800.522.7287).