

Continuous Glucose Telemetry Guidelines for Success

The HD-XG is a powerful tool for the collection of continuous glucose, temperature, and activity in mice and rats. Successful implementation requires that the user understand the following:

- **Surgery is required**
 - In addition to a surgical manual, free surgical consultation is provided to our customers. If further assistance is needed surgical training and on-site surgery are available as a service.
- **The device is guaranteed for 28 days following implantation**
 - The 28 day period begins immediately upon sensor contact with blood. Plan to collect high priority timepoints within this period.
 - Some devices may function for 6 to 8 weeks or longer.
- **Overpopulate the Study**
 - 80-95% of implanted animals provide reliable data at 28 days.
 - Assume this in your study planning and overpopulate as needed.
 - Failures prior to 28 days may be due to animal physiology, post-operative complications, or the device.
- **Once implanted, the device should always be kept on**
 - Turning the device off may negatively affect the sensor life and/or calibration.
 - If a device is turned off for more than a few hours, a multipoint calibration should be performed several hours after being turned back on.
- **Calibration must be performed with care**
 - The accuracy of calibration is very sensitive to the procedure and timing of measurements. Please refer to the calibration best practices technical note.
- **Implantation may affect your animal or disease model**
 - Surgery or presence of the device may alter the model. Compare with untreated and sham controls until your model is characterized with this technology.
- **Reuse is not recommended with this device**
 - The device can not be disinfected or sterilized without damaging the glucose sensing enzyme.
- **Do not store the device for extended periods of time before use**
 - The glucose sensing enzyme has a finite shelf life. Surgically implant devices before the expiration date on the package label.

If you desire to understand these items further or discuss how best to implement the HD-XG in your application please contact us at glucose@datasci.com to schedule a technical discussion.