Göttingen Minipigs Pre-implanted
with DSI PhysioTel Digital Telemetry Implants

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Introduction
In collaboration with Data Sciences International (DSI), Ellegaard Göttingen Minipigs A/S (EGM) now offers Minipigs pre-fitted with telemetry transmitters. The procedure has been established for transmitter placement in both the neck and the flank. The picture below is from the operating theater in the new Research Barrier at EGM during one of the operations.

Two Sizes of Minipigs and Transmitters Tested
In 4 Göttingen Minipigs (2 males and 2 females) aged 4 months, and weighing 6-10 kg, M-11 transmitters were placed in the flank, with the ECG electrodes placed on the chest and the blood pressure catheter placed in the femoral artery (extending into the aorta). This setting was chosen to mimic a typical toxicology study. In the picture below, the transmitter can be seen in the flank of the Minipig on the left.

In 4 Göttingen Minipigs (2 males and 2 females) aged 8 months, and weighing 16-20 kg, L-11 transmitters were placed in the neck, with one of the ECG electrodes placed on the chest and the other one in the jugular vein. The blood pressure catheter was placed in the external carotid artery in these Minipigs. This setting was chosen to mimic a typical Safety Pharmacology set-up intended to re-use the Minipigs for several studies.

Results
- All 8 Göttingen Minipigs healed well
- High quality signals were obtained throughout the 2 months tested so far

Weekly 24-hour recordings of blood pressure (systolic, mean and diastolic) and heart rate in the small Göttingen Minipigs (left graph) and in larger ones (right graph). Error bars indicate mean ± SEM

Pharmacologically induced changes

Pharmacological effects on mean blood pressure (BP), heart rate (HR) and QT interval (corrected for heart rate by mean of Fredericks's formula) of metemoteramine given at 7.30 am and metemotrine plus atropine given at 10:00 am. As can be seen, such pharmacological effects are readily picked up by this method. Error bars indicate mean ± SEM

Conclusion
Göttingen Minipigs are available pre-implanted with DSI PhysioTel telemetry implants

Contact us for more information
- Barrier bred Göttingen Minipigs
- Our research barrier, surgical suite and prepared animal models, such as the one presented here
- Transgenic animal models
- Biological material
- Courses in Handling & Dosing, Animal Training, Catheter Workshop, Anaesthesia of the Göttingen Minipig or customized courses according to your needs