icare tonometer LAB

IOP MEASURING EXCELLENCE

WORLD WIDE APPROVALS AND PATENTS

Icare Finland developed the Tonolab® tonometer for glaucoma research. The Tonolab® has been specially designed for rodent (rat /mouse) IOP measurement. The tonometer is based on a measuring principle, in which a very light probe is used to make momentary contact with the cornea. This inductive/ impact principle is also known as the rebound method. The Icare technology has worldwide official approvals, patents and satisfied users all over the world. Clinical studies show that Icare Tonolab is accurate and comfortable to the subject.

SAFE, PAINLESS AND HYGIENIC PROCEDURE

Measuring IOP with the Icare Tonolab is safe and painless. The disposable probe touches the cornea very lightly for only a fraction of a second. As no topical anesthetic or disinfection is needed, the whole procedure is over rapibly and disturbance to the animal is minimal.

CE 0044

ISO 13485:2003

TÜV NORD

STUDY REFERENCES*

REBOUND TONOMETRY IN CONSCIOUS, CONDITIONED MICE AVOIDS THE ACUTE AND PROFOUND EFFECTS OF ANESTHESIA ON INTRAOCULAR PRESSURE

"Rebound tonometry can be used to obtain accurate IOP measurements in conscious, restrained mice while avoiding the rapid and profound ocular hypotensive effects of general anesthesia."

J Ocul Pharmacol Ther. 2008 Apr;24(2):175-85.

THE EFFICACY OF TONOLAB IN DETECTING PHYSIOLOGICAL AND PHARMACOLOGICAL CHANGES OF MOUSE INTRAOCULAR PRESSURE–COMPARISON WITH TONOPEN AND MICRONEEDLE MANOMETERY

"TonoLab promises to be a non-invasive and useful method to evaluate physiological and pharmacological studies in mouse eyes."

Curr Eye Res. 2008 Mar;33(3):247-52.

MANOMETRIC CALIBRATION AND COMPARISON OF TONOLAB AND TONOPEN TONOMETERS IN RATS WITH EXPERIMENTAL GLAUCOMA AND IN NORMAL MICE

"In mouse and rat eyes, including rats with chronic IOP elevation, the TonoLab accurately reflected manometrically set IOP in an efficient manner."

J Glaucoma. 2006 Dec;15(6):512-9.

COMPARISON OF INVASIVE AND NON-INVASIVE TONOMETRY IN THE MOUSE

"The rebound tonometer has a significant advantage over cannulation tonometry in that it permits longitudinal IOP measurement in conscious mice."

Exp Eye Res. 2006 Jun;82(6):1094-9. Epub 2006 Feb 7.

ICARE FINLAND

is the original developer of rebound technology in tonometers. Today the light weight, hand held, portable Icare® tonometers are approved and recommended by professionals all over the world.

THE ADVANCED ICARE® PRODUCT LINE

offers reliable, high precision, reproducible accuracy in measuring intraocular pressure in any circumstances, in both experienced and inexperienced hands.

Variations of Icare® tonometers are available for several use:

- clinical use for humans
- veterinary use, e.g. pets and racehorses
- laboratory use for research

ICARE® TONOLAB

TECHNICAL INFORMATION

Type: TV02.
The device conforms to CE regulations.

Dimensions:
13 – 32 mm (W) * 45 – 80 mm (H) * 230 mm (L).

Weight:
155 g (without batteries), 250 g (4 x AA batteries).

Power supply: 4 x AA batteries.

Display range: 0-99 mmHg

Accuracy of display: 1.

Display unit: Millimeter mercury (mmHg).

There are no electrical connections from the tonometer to the patient.

The device has B-type electric shock protection.

Storage/transportation environment:
Temperature +5 to +40 °C.

Rel. humidity 10 to 80% (without condensation).

icare measuring excellence

www.icaretonometer.com