

Certification process for „Quantitative Sensory Testing“

Why to become certified?

The certification of a QST-laboratory serves as quality assurance on the basis of structural, procedural and outcome quality. The seal of quality by Certkom e.V. was developed in collaboration with the German Research Network on Neuropathic Pain (DFNS) e.V. (2,3). Laboratories working under this seal of quality show that they accept external quality controls.

The German Research Network on Neuropathic Pain (DFNS), the world's leading scientific network for research on neuropathic pain, recommends only using data collected by certified laboratories for complex medical diagnostic, medical certificates as well as for scientific projects.

Who can become certified?

Certification of a QST-laboratory requires a successful participation in an external quality assurance as well as the usage of a validated QST-protocol. Recommended, but not obligatory, is the protocol developed by the German Research Network on Neuropathic Pain (2,5). Alternatively other validated protocols might be used. For the analysis of QST data during the certification process, previously published or otherwise verifiable normative data has to be used (current recommendations 1,4,5).

QST-laboratories to be certified must meet the following requirements:

- Medical doctor as laboratory leader,
- at least one year of QST experience,
- sufficient QST-training (*by an accredited centre*),
- suitable technical equipment,
- regular quality assurance of the technical equipment,
- performance of at least 30 QST sessions per year,
- examination of patients in clinically working laboratories or examination of somatosensory changes in human surrogate models of (neuropathic) pain in experimentally working laboratories.

How does the certification process work?

Structural, procedural and outcome quality are evaluated. Structural and procedural criteria are assessed by standardized questionnaires and reviewed randomly. Outcome quality of the laboratory is evaluated by physicians with superior experience in QST (external assessors of painCert GmbH, accredited by Certkom e.V.). They audit interpretations of QST-data from the laboratory itself and of prototype QST-data given to the laboratory to be certified. Additional to the analysis of patient data, QST data of healthy control subjects assessed by the laboratory to be certified are analyzed.

For the analysis of patient data, the German Research Network on Neuropathic Pain (DFNS) offers utilization of age- and gender specific normative data (male/female; adults /children) from the standard testing sites cheek, hand and foot (see literature below). Experimentally working QST laboratories without patient contact can submit QST profiles and analyses of experimental measurements.

How long is the certification valid?

The certification is valid for 3 years. With participation in interim-audits the validity of the certificate can be prolonged to 5 years.

What to do if you want to become certified?

Certification criteria and additional information about the certification process are available from the Certkom e.V. administration office: info@certkom.com

Please contact the German Research Network on Neuropathic Pain (DFNS) concerning questions regarding the DFNS protocol: http://www.neuro.med.tu-muenchen.de/dfns/e_index.html

For information about certification fees contact the accredited certification center painCert GmbH: <http://www.paincert.org>

Literature:

1. Blankenburg M et al. Reference values for quantitative sensory testing in children and adolescents: developmental and gender differences of somatosensory perception. *Pain*. 2010;149:76-88.
2. Geber et al. Zertifizierung von QST-Laboren. *der Schmerz*. 2009 Feb;23:65-9.
3. Krumova E, et al. Quantitative sensory testing: a diagnostic tool for painful neuropathy *Future Neurology*, September 2010, Vol. 5, No. 5, Pages 721-733.
4. Magerl W, et al. Reference data for quantitative sensory testing (QST): refined stratification for age and a novel method for statistical comparison of group data. *Pain*. 2010 Dec;151(3):598-605.
5. Rolke et al. Quantitative Sensory Testing in the German Research Network on Neuropathic Pain (DFNS): Standardized Protocol and Reference Values. *Pain* 2006b; 123: 231-243.