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**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB/T 43638-2024**

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**Technical specification for forensic clinical identification of  
peripheral nerve dysfunction**

周围神经功能障碍法医临床鉴定技术规范

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## Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document is proposed and coordinated by the Ministry of Justice of the People's Republic of China. This document was drafted by: Forensic Science Research Institute, China University of Political Science and Law, Sichuan University, and Huashan Hospital Affiliated to Fudan University. The main drafters of this document are. Gao Dong, Fan Lihua, Xia Wentao, Deng Zhenhua, Wang Xu, Xu Lei, Tian Dong, Xia Qing, and Shen Hanjian. Technical specification for forensic clinical identification of peripheral nerve dysfunction

## 1 Scope

GB/T 43638-2024 is the Chinese technical specification for the forensic clinical assessment of peripheral nerve dysfunction. Nerve injury is one of the most contested findings in personal injury and insurance work, because the deficit is largely reported by the person being examined, weakness and numbness are easily exaggerated or feigned, and the compensation attached to a nerve injury is substantial. The standard is built to make the assessment objective. It sets the principles and the scope, the anatomical and functional basis, the history and clinical examination required including the motor, sensory and autonomic assessment and the specific tests for each major nerve, the electrodiagnostic

examination with the nerve conduction and needle electromyography protocols and the criteria for interpreting them, the imaging where indicated, the recognition of exaggeration and inconsistency, the timing of the assessment relative to the injury and the reassessment interval, the grading of the dysfunction and the conclusions and report. It took effect on 1 July 2024.

This document specifies the requirements for the forensic clinical evaluation of peripheral nerve dysfunction and describes the methods of evaluation. This document is applicable to forensic clinical identification of various human injury cases involving peripheral nerve dysfunction, and other cases involving peripheral nerve dysfunction. The forensic clinical identification of functional impairment shall be carried out as a reference.

## 2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document. SF/T 0096 Assessment of limb motor function SF/T 0111 Forensic clinical examination specification

## 3 Terms and definitions

The following terms and definitions apply to this document.

3.1 peripheral nerve Nerve fiber tissue outside the central nervous system (brain or spinal cord). Note

1. According to the different parts of the central nervous system, nerves can be divided into cranial nerves, spinal nerves and autonomic nerves. Note

2. The peripheral nerves referred to in this document mainly refer to the important spinal nerves and their branches involved in limb function in forensic clinical identification, including the brachial plexus and its important branches (such as suprascapular nerve, axillary nerve, musculocutaneous nerve, radial nerve, median nerve, ulnar nerve, etc.) and lumbar plexus and its important branches (such as femoral nerve, sciatic nerve, common peroneal nerve, tibial nerve, etc.), and the branches of the above nerves with important motor functions are also included (such as radial nerve deep branch, anterior interosseous nerve, recurrent branch of median nerve, deep branch of ulnar nerve, deep peroneal nerve, superficial peroneal nerve, etc.) If you encounter peripheral nerves not covered in this document during the identification, Peripheral nerve injury or disease is identified by comparing with the corresponding nerves.

3.2 Electromyography; EMG A neurophysiological examination technique that records the electrical properties of muscles at rest, during voluntary contractions, and when peripheral

nerves are stimulated.

Note. Electromyography in a narrow sense usually refers to the use of conventional concentric needle electrodes to record the various electrical properties of muscles at rest and in voluntary contraction. In addition to the heart circle needle electrode, it also includes nerve conduction testing, repeated nerve electrical stimulation, F wave, H reflex, blink reflex, single fiber electromyography, motor unit counting Number, giant electromyography, etc.

3.3 motor unit potential; MUP The potential when a motor neuron (anterior horn cell of the spinal cord) fires a single impulse causing all the muscle fibers innervated by its axon to contract synchronously.

3.4 The nearly synchronous electrical activity of muscle fibers recorded from a muscle after the nerve innervating the muscle is directly or indirectly stimulated. The sum of the bits.