



NeuroMetrix Announces Publication of Study Demonstrating that DPNCheck Accurately Diagnoses Diabetic Peripheral Neuropathy

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WOBURN, Mass., March 14, 2024 (GLOBE NEWSWIRE) -- NeuroMetrix, Inc. (Nasdaq: NURO) noted the recent publication of a large study demonstrating that DPNCheck[®] combined with standard EKG or DPNCheck alone accurately detects diabetic peripheral neuropathy (DPN).

[Hayashi and colleagues](#) evaluated 167 patients with Type 1 or Type 2 diabetes. The reference standard for DPN was a gold standard nerve conduction study. The authors developed a predictive formula based on DPNCheck measurements, patient age and the coefficient of variation of R-R intervals (CV_{R-R}), which quantifies autonomic function and is a standard output of EKG machines. DPNCheck combined with CV_{R-R} had high diagnostic performance with an area under the receiver operating curve of 0.88. Similar performance was reported when using just DPNCheck to diagnose DPN. The authors concluded "The use of DPNCheck and electrocardiogram would make the diagnosis of DPN simple, ubiquitous, and with high reproducibility and reliability."

"This novel study by Professor Kamiya and his colleagues at the Aichi Medical University School of Medicine continues to build the large body of scientific evidence supporting the use of DPNCheck to diagnose DPN. The diagnostic accuracy of DPNCheck has now been reported in more than 10 independent published studies that evaluated over 1500 people with diabetes," said Shai N. Gozani, M.D., Ph.D., CEO of NeuroMetrix. "The consistently high accuracy of DPNCheck stands in stark contrast to monofilament testing, which has been the standard approach to DPN screening despite its low accuracy and reliability. A recent large, multi-center study by [Dunker and colleagues](#) concluded "We do not recommend the use of the 5.07/10 g monofilament in the evaluation of patients with diabetes referred to polyneuropathy assessments."

About Diabetic Peripheral Neuropathy

Diabetic peripheral neuropathy (DPN) is the most common long-term complication of diabetes, affecting half of people with diabetes. The clinical and economic burden of DPN stems from its central role in the development of foot ulcers that can lead to lower extremity amputation. DPN also causes debilitating chronic nerve pain and altered proprioception that increases the risk of falling, particularly in the elderly. Overall, DPN is associated with a substantial reduction in quality of life and decreased activities of daily living.

About DPNCheck

DPNCheck is an automated, fast, accurate, and quantitative sural nerve conduction test used to evaluate peripheral neuropathies. It is designed to be used by clinicians at the point-of-care to detect peripheral neuropathies at an early stage when intervention is likely to be most effective, to stage the severity of nerve deterioration and to monitor disease progression and treatment benefits. For more information, visit dpncheck.com.

About NeuroMetrix

NeuroMetrix is a commercial stage healthcare company that develops and commercializes neurotechnology devices to address unmet needs in the chronic pain and diabetes markets. The Company's products are wearable or hand-held medical devices enabled by proprietary consumables and software solutions that include mobile apps, enterprise software and cloud-based systems. The Company has two commercial brands. Quell[®] is a wearable neuromodulation platform. DPNCheck[®] is a point-of-care screening test for peripheral neuropathy. For more information, visit www.neurometrix.com.

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