

# NeuroMetrix NCS/EMG Products Bibliography

## March 2011

### ADVANCE NCS/EMG System

1. Kong X, Schoenfeld DA, Lesser EA, Gozani SN. Implementation and evaluation of a statistical framework for nerve conduction study reference range calculation. *Comput Methods Programs Biomed.* 2010;97(1):1-10.
2. Kong X, Lesser EA, Gozani SN. Repeatability of nerve conduction measurements derived entirely by computer methods. *Biomed Eng Online.* 2009;8:33.
3. Tracey BH, Iyer D, Lesser EA, Potts FJ, Gozani SN. Comparison of expert and algorithm agreement in measurement of nerve conduction study parameters. *Biomed Signal Process Control.* 2010;5(2):158-63.

### Pre-Configured Electrodes, Clinical Accuracy and Reliability

4. Strickland JW and Gozani SN. Accuracy of In-office Nerve Conduction Studies for Median Neuropathy. A Meta-analysis. *J Hand Surg [Am].* 2011;36(1):52-60.
5. Armstrong TN, Dale AM, Al-Lozi MT, Franzblau A, Evanoff BA. Median and Ulnar Nerve Conduction Studies at the Wrist: Criterion Validity of the NC-stat Automated Device. *J. Occup Environ Med.* 2008;50(7):758-764.
6. Perkins BA, Orszag A, Grewal J, Ng E, Ngo M, Bril V. Multi-site Testing With a Point-of-Care Nerve Conduction Device Can Be Used in an Algorithm to Diagnose Diabetic Sensorimotor Polyneuropathy. *Diabetes Care.* 2008;31(3):522-4.
7. Fisher MA, Bajwa R, Somashekar KN. Routine Electrodiagnosis and a multiparameter technique in lumbosacral radiculopathies. *Acta Neurologica Scandinavica.* 2008;118(2):99-105.
8. Fisher MA, Bajwa R, Somashekar KN. Lumbosacral radiculopathies--the importance of EDX information other than needle electromyography. *Electromyogr Clin Neurophysiol.* 2007;47:377-84.
9. Jabre JF, Salzsieder BT, Gnemi KE. Criterion validity of the NC-stat automated nerve conduction measurement instrument. *Physiol Meas.* 2007;28(1):95-104.
10. Kong X, Lesser E, Megerian JT, Gozani SN. Repeatability of nerve conduction measurements using automation. *J. Clin Monit Comput* 2006;20(6):405-10.
11. Perkins BA, Grewal J, Ng E, Ngo M, Bril V. Validation of a novel point-of-care nerve conduction device for the detection of diabetic sensorimotor polyneuropathy. *Diabetes Care.* 2006;29(9):2023-7.
12. Kong X, Gozani SN, Hayes MT, Weinberg DH. NC-stat sensory nerve conduction studies in the median and ulnar nerves of symptomatic patients. *Clin Neurophysiol.* 2006;117(2):405-13.
13. Elkowitz SJ, Dubin NH, Richards BE, Wilgis EF. Clinical utility of portable versus traditional electrodiagnostic testing for diagnosing, evaluating, and treating carpal tunnel syndrome. *Am J Orthop.* 2005;34 (8):362-4.
14. Fisher MA. Comparison of automated and manual F-wave latency measurements. *Clin Neurophysiol.* 2005; 116(2):264-9.
15. Rotman MB, Enkvetchakul BV, Megerian JT, Gozani SN. Time course and predictors of median nerve conduction after carpal tunnel release. *J Hand Surg [Am].* 2004;29(3):367-72.

16. Vinik AI, Emley MS, Megerian JT, Gozani SN. Median and ulnar nerve conduction measurements in patients with symptoms of diabetic peripheral neuropathy using the NC-stat system. *Diabetes Technol Ther.* 2004;6(6):816-24.
17. Wells MD, Meyer AP, Emley M, Kong X, Sanchez R, Gozani SN. Detection of lumbosacral nerve root compression with a novel composite nerve conduction measurement. *Spine.* 2002;27(24):2811-9.
18. Leffler CT, Gozani SN, Cros D. Median neuropathy at the wrist: diagnostic utility of clinical findings and an automated electrodiagnostic device. *J Occup Environ Med.* 2000;42(4):398-409.

#### **Pre-Configured Electrodes, Clinical Outcomes**

19. Shepherd MM. Clinical outcomes of electrodiagnostic testing conducted in primary care. *J Am Board Fam Med.* 2010;23(5):584-90.
20. Kong, X, Lesser EA, Pott F, Gozani SN. Utilization of Nerve Conduction Studies for Assessment of Polyneuropathy in Patients with Diabetes. *J Diabetes Sci Technol.* 2008;2(2):268-274.
21. Megerian JT, Kong X, Gozani SN. Utility of nerve conduction studies for carpal tunnel syndrome by FM/PCP/IM physicians. *J Am Board Fam Med.* 2007;20:60-64.
22. Vinik AI, Kong X, Mergian JT, Gozani SN. Diabetic nerve conduction abnormalities in the primary care setting. *Diabetes Technol Ther.* 2006;8(6):654-662.
23. Katz RT. NC-stat as a screening tool for carpal tunnel syndrome in industrial workers. *J Occup Environ Med.* 2006;48(4):414-8.
24. Megerian JT, Kong X, Lesser E, Gozani SN. NC-stat as a screening tool. Upper extremity nerve conduction studies in diabetic patients with the NC-stat. *J Occup Environ Med.* 2006;48(8):755-6.

#### **Pre-Configured Electrodes, Use in Clinical Research**

25. Descatha A, Dale AM, Franzblau A, Coomes J, Evanoff B. Diagnostic strategies using physical examination are minimally useful in defining carpal tunnel syndrome in population-based research studies. *Occup Environ Med.* 2010;67(2):133-5.
26. Jones S. Jr and Hernandez C. An Investigation of the Prevalence of Upper Limb Neuropathies in Different Types of College Musicians by Use of Neurometrix Device. *International Journal of Biology.* 2010;2(1): 132-142.
27. Conlon CF, Krause N, Rempel DM. A randomized controlled trial evaluating an alternative mouse or forearm support on change in median and ulnar nerve motor latency at the wrist. *Am J Ind Med.* 2009;52(4):304-10.
28. Armstrong T, Dale AM, Franzblau A, Evanoff BA. Risk factors for carpal tunnel syndrome and median neuropathy in a working population. *J Occup Environ Med.* 2008;50(12):1355-1364.
29. Conlon CF, Krause N, Rempel DM. A Randomized Controlled Trial Evaluating an Alternative Mouse and Forearm Support on Upper Body Discomfort and Musculoskeletal Disorders among Engineers. *Occup Environ Med.* 2008;65(5):311-8..
30. Lavery LA, Murdoch DP, Williams J, Lavery DC. Does Anodyne Light Therapy Improve Peripheral Neuropathy in Diabetes? A Double Blind, Sham Controlled Randomized Trial to Evaluate Monochromatic Infrared Photo Energy. *Diabetes Care.* 2008;31(2):316-21.
31. Goel S, Goldberg GL, Kuo DY, Muggia F, Arezzo J, Mani S. Novel neurosensory testing in cancer patients treated with the epothilone B analog, ixabepilone. *Ann Oncol.* 2008;19(12):2048-52.

32. Hardy T, Sachson R, Shen S, Arbustner M, Boulton AJM. Does treatment with Duloxetine for neuropathic pain impact glycemic control. *Diabetes Care*. 2007;30:21-26.
33. Raskin J, Smith TR, Wong K, Pritchett YL, D'Souza DN, Iyengar S, Wernicke JF. Duloxetine versus routine care in the long-term management of diabetic peripheral neuropathic pain. *J Palliat Med*. 2006;9(1):29-40.
34. Conlon CF, Rempel DM. Upper extremity mononeuropathy among engineers. *J Occup Environ Med*. 2005;47(12):1276-8
35. Raskin J, Pritchett YL, Wang F, D'Souza DN, Waninger AL, Iyengar S, Wernicke JF. A double-blind, randomized multicenter trial comparing Duloxetine with placebo in the management of diabetic peripheral neuropathic pain. *Pain Med*. 2005;6(5):346-56.
36. Guyette TM, Wilgis EF. Timing of improvement after carpal tunnel release. *J Surg Orthop Adv*. 2004;13 (4):206-9.
37. Mani S, McDaid H, Hamilton A, Hochster H, Cohen MB, Khabelle D, Griffin T, Lebowitz DE, Liebes L, Muggia F, Horwitz SB. Phase I clinical and pharmacokinetic study of BMS-247550, a novel derivative of epothilone B, in solid tumors. *Clin Cancer Res*. 2004;10(4):1289-98.

### **Pre-Configured Electrodes, Review Articles**

38. Kong X, Lesser EA, Gozani SN. Nerve conduction studies: clinical challenges and engineering solutions. *IEEE Eng Med Biol Mag*. 2010;29(2):26-36.
39. Papanas N, Ziegler D. New diagnostic tests for diabetic distal symmetric polyneuropathy. *J Diabetes Complications*. 2009. [Epub ahead of print]
40. Strandberg EJ, Mozaffar T, Gupta R. The role of neurodiagnostic studies in nerve injuries and other orthopedic disorders. *J Hand Surg Am*. 2007;32(8):1280-90.
41. Lesser EA, Starr J, Kong X, Megerian JT, Gozani SN. Point-of-service nerve conduction studies: An example of industry driven disruptive innovation in health care. *Perspect Biol Med*. 2007 ;50(1):40-53.
42. Gozani SN, Fisher MA, Kong X, Megerian JT, Rutkove SB. Electrodiagnostic automation: principles and practice. *Phys Med Rehabil Clin N Am*. 2005 Nov;16(4):1015-32.