Neuro Kinetics, Inc.'s (NKI) study objective is to validate and secure Food and Drug Administration certification for its mild traumatic brain injury (mTBI)/concussion protocol as a viable clinical tool to detect the presence of an mTBI in military personnel, facilitate quality return-to-duty decisions, and to monitor recovery.

American service members are uniquely exposed to the risks of traumatic brain injury from routine military operations, enemy fire, and improvised explosive devices. Over the past 12 years, the Department of Defense (DoD) reports that more than 200,000 worldwide service members have been diagnosed with traumatic brain injury. The issue is that current diagnostic techniques have not been shown to be reliable.

In 2010, NKI was awarded a Health and Human Services (HHS) Grant to fund a student athlete study to assess and validate the I-Portal test battery as an objective measure to detect sports concussions. In conjunction with Allegheny Singer Research Institute and Allegheny General Hospital, NKI collected baseline data on 292 students prior to the fall 2010 sports season and data on the 10 students who received a concussion. The results of the data set were very compelling.

The test battery protocol, when properly designed and used in conjunction with the precise and sophisticated technologies embedded in NKI's I-Portal devices, shows great promise as an objective and sensitive tool for detecting mTBI. I-Portal technology appears to provide pathologic clues that other technologies miss completely.

For this study, NKI is collaborating with military and sports medicine researchers to collect data for a thorough evaluation of oculomotor testing using I-Portal-based technology to objectively diagnose mTBI and to develop a set of criteria for return-to-duty decisions. Because NKI's I-Portal technology has been installed in 35 DoD and Department of Veterans Affairs facilities, success with this study is expected to lead to an efficient and rapid deployment.

Since its founding in 1984, NKI has been the technological leader in its field and is one of the few companies experienced in the integration of neurophysiologic stimulus profiles with precise eye measurement technology. NKI's patented and patent pending I-Portal devices generate an unparalleled analysis that is objective, measurable, accurate, and repeatable.