

Brain PET

with NeuroQ™ quantitative analysis

▶ PET for differential diagnosis of dementia

In addition to the search for effective treatment and cures to our most pervasive and lethal diseases, the development of powerful diagnostic techniques is critical, to allow effective treatments to begin as early as possible.

For over twenty years, clinicians and researchers have utilized the 3-dimensional neuroimaging capabilities of PET and SPECT for the identification and differential diagnosis of dementia. Many neurodegenerative diseases produce significant alterations in brain function detectable with PET or SPECT even when structural images with CT or MRI reveal no abnormality.

Specifically, this experience shows that by the time a patient presents with symptoms of many neurologic and psychiatric conditions, substantial alteration of cortical metabolic function generally has occurred – with associated decreases in glucose metabolism in certain brain areas readily detectable on FDG-PET images.

Accurate PET quantification and analysis



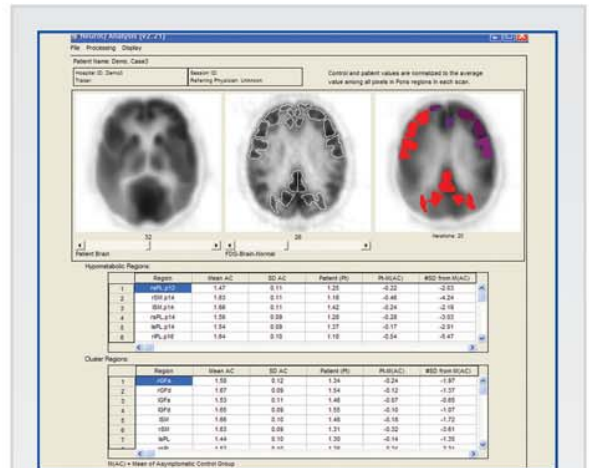
NeuroQ™ is a powerful software platform to assist radiologists, nuclear medicine physicians and other professional interpreters of PET images with interpretation of brain scans.

Through rapid and automated quantification of standardized regions of interest (sROI's), NeuroQ™ allows you to compare the activity of brain regions in an individual scan to regional activity values derived from a database of normal scans through quantitative and statistical assessments.

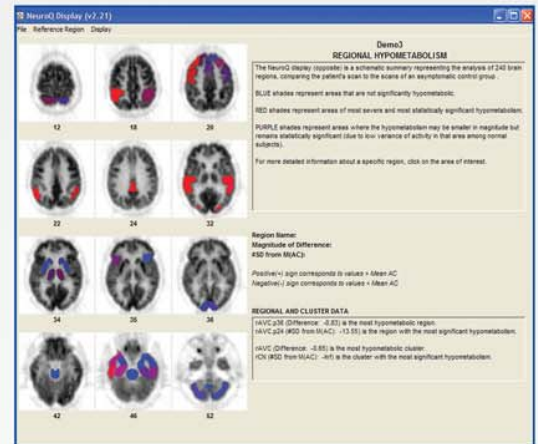
Syntermed developed NeuroQ™ in affiliation with Daniel Silverman MD, PhD, Head of the Neuronuclear Imaging Section at UCLA Medical Center.

NeuroQ has a validated capability to:

- quantitatively detect clinically meaningful abnormalities of regional brain metabolism
- accurately quantify the relative activity in multiple brain regions
- generate comprehensive color-coded image presentations



Quantitative analysis for individual transaxial slices



Global analysis of Brain PET study

