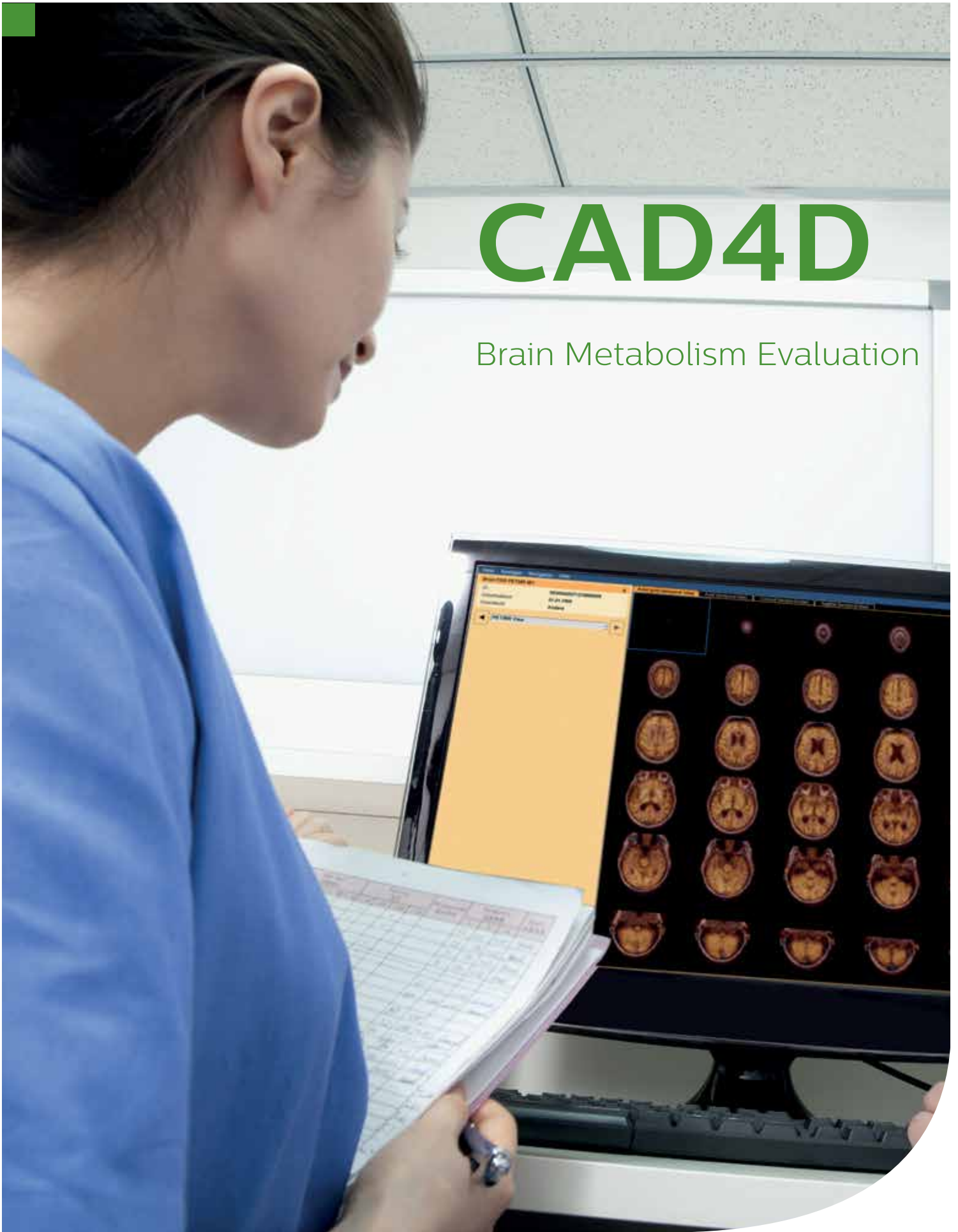


# CAD4D

Brain Metabolism Evaluation





## CAD4D

Brain  
metabolism  
evaluation

## CAD4D FDG

CAD4D FDG is a powerful tool for advanced and intuitive analysis of FDG-PET brain images in Research work, featuring:

- advanced non-rigid stereotactical normalization of FDG-PET brain scans
- voxel-wise statistical maps for detecting regions of statistically significant hypo and hyper-metabolism
- interactive adjustment of significance level
- stereotactic surface projection for simplified viewing
- quantitative comparison of detected patterns to databases for specific diseases\*
- tools for verification and quality assurance
- overlay of FDG-PET and T1-MRI, optimized for visualization of the temporal lobe and hippocampus

## CAD4D Amyloid

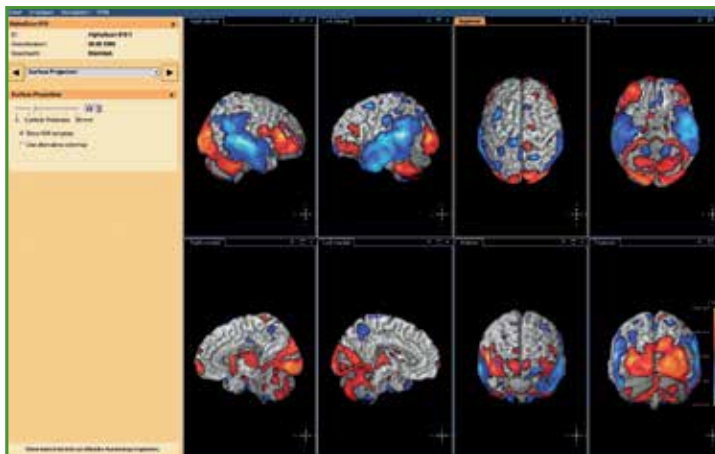
The CAD4D Amyloid application allows you to easily assess and visualize the amyloid plaque levels in brain scans, featuring:

- advanced non-rigid stereotactical normalization of amyloid brain scans
- regional and voxel-wise SUV ratios relative to the mean SUV in cerebellum
- stereotactic surface projection for simplified viewing
- tools for verification and quality assurance
- overlay of amyloid PET and T1-MRI, optimized for visualization of the temporal lobe and hippocampus

\* Definition of your own databases available in combination with a Premium service contract.



Voxel-wise statistical maps of glucose hypo (blue) and hyper-metabolism (red) in the brain



Surface projection of areas with hypo and hyper-metabolism on a MRI template of the brain



PET/MRI fusion view



Calculation of Amyloid SUV ratios per voxel and for relevant anatomical structures in the brain



## Publications

**Voxel-based classification of FDG PET in dementia using inter-scanner normalization.**

Thiele F, Young S, Buchert R, Wenzel F.  
*NeuroImage Volume 77, 15 August 2013, Pages 62-69*

**B-spline-based stereotactical normalization of brain FDG PET scans in suspected neurodegenerative disease: impact on voxel-based statistical single-subject analysis.**

Wenzel F, Young S, Wilke F, Apostolova I, Artl S, Jahn H, Thiele F, Buchert R.  
*NeuroImage Volume 50, Issue 3, 15 April 2010, Pages 994-1003*

**Association between FDG uptake, CSF biomarkers and cognitive performance in patients with probable Alzheimer's disease.**

Artl S, Brassens S, Jahn H, Wilke F, Eichenlaub M, Apostolova I, Wenzel F, Thiele F, Young S, Buchert R.  
*Eur. J. Nucl. Med. Mol. Imaging Volume 36, Issue 7, July 2009, Pages 1090-1100*



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