NEUROCLOUD

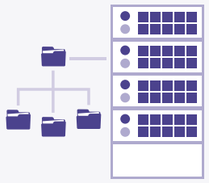
ADVANTAGES

Fast, intuitive and fully automatic

Uploading the images to Neurocloud using a web browser is all the interaction you need to perform.

Free periodic updates

We are constantly improving our solutions, incorporating new features and improving others. An example of our continuous improvement is the increase in our healthy subjects database, which improves the sensitivity of the results.



Ready to use, no set up required

All of your Neurocloud solutions are available in the cloud and are accessible at any time, anywhere and from any device.

100% Compatible with your technology

Our solutions are fully compatible with DICOM standard. We guarantee the optimal functioning of our Neurocloud solutions with recent and older scanners and average computers.

Personalized assistance

Whatever your needs may be, we are always available to assist you.

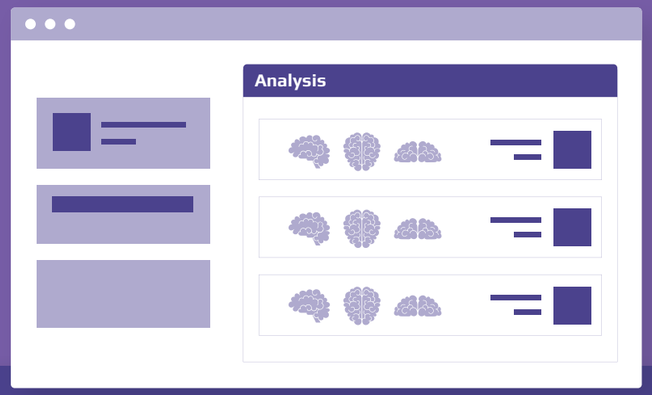
Tailored to your needs

We will fully adapt to your needs, you can contract anything from individual reports to annual service plans.

Safe and clinically validated

All of our Neurocloud solutions are clinically validated and have been granted with the CE Mark. In addition, we guarantee the protection and anonymization of all the clinical information in compliance with the EU regulations.

NEUROCLOUD



The online platform assisting you with clinically validated quantification algorithms for improving the diagnosis of neurological diseases.

QUBIO tech

#imaging different

Cloud-based medical imaging quantification software

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NEUROCLOUD DOPA

YOUR DATSCAN™ SPECT QUANTIFICATION ASSISTANT

Assistance for nuclear physisians

Automatically calculating SUR (Specific Uptake Ratio) values of the caudate nuclei and different areas of the putamens, as well as asymmetry indexes, complementing the visual analysis.

Assistance for neurologists

Facilitating the interpretation of the nuclear medicine report thanks to the incorporation of graphic information (visual comparison with normality template) and quantitative values.

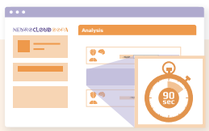
Diagnosis assistance

+ Simple

Making the visual interpretation easier by offering the comparison of the patient's image with a normality pattern and by incorporating quantitative data.

+ Accurate

Guaranteeing an optimal positioning of the Regions Of Interest (ROIs), cropping each striatum and standardising it to the normal template separately.



+ Fast

Providing results in less than 90 seconds. Thanks to our fully automatic pipeline, you just need to upload your images.

DATSCAN™ SPECT image processing

01. Spatial and intensity normalization of the DATSCAN image to a standardized normal template.
02. Adjustment of the spatial normalization cropping each striatum and adjusting it to the template separately.
03. Placement of the ROIs over the patient and calculation of the quantification values.

NEUROCLOUD PET

YOUR BRAIN PET DIAGNOSIS ASSISTANT

Assistance for nuclear medicine physisians

Automatically providing visual and quantitative information which identifies both hypometabolic and hypermetabolic areas in FDG-PET and providing SUVR values in amyloid-PET.

Assistance for neurologists

Facilitating the interpretation of the nuclear medicine report by providing metabolic patterns of different neurological conditions.

Diagnosis assistance

+ Simple

Integrating all the necessary resources for diagnosis: processed brain images. data in tables and plots and an interactive DICOM viewer.

+ Sensitive

Identifying neurodegeneration in early stages of the disease thanks to one of the largest FDG-PET healthy subject databases (>150 subjects) in the market.

+ Fast

Totally automatic processing pipeline providing results in less than 5 minutes.

+ Objective

Reducing the interobserver variability among specialists.

FDG-PET image processing

01. Image fusion: PET/MRI or PET/CT.
02. ROI-based analysis comparing to a database of healthy subjects in order to extract z-scores and % deviations from normality.
03. Statistical Voxel-by-voxel parametric analysis.
04. Detection and identification of hypometabolic or hypermetabolic areas.

Amyloid-PET image processing

01. Image fusion: PET/MRI.
02. MRI segmentation into grey matter, white matter and CSF.
03. Calculation of SUVR values and result (positive/negative) compared with validated thresholds.

NEUROCLOUD SISCOM

YOUR ICTAL SPECT QUANTIFICATION ASSISTANT

Assistance for nuclear physicians

Automatically carrying out the subtraction of ictal and interictal SPECT and the subsequent coregistration to MRI, identifying the epileptogenic focus.

Assistance for neurologists and surgeons

Simplifying the conclusions from different tests, since it combines the functional information of the SPECT with the anatomical information of the MRI.

Diagnosis assistance

+ Sensitive

Proving a sensitivity of over 80% and a specificity of over 90% when locating the epileptogenic focus[1].

+ Safe

The rate of patients free of seizures after surgery is 3.28 times higher in patients showing a concordant SISCOM (2.44 times higher in non-temporal epilepsy)[2].

+ Fast

Fully automating the processing and offering results in 5 minutes.

ICTAL SPECT image processing

01. Co-registration of both SPECT images.
02. Co-registration of the interictal SPECT image to the MRI and application of the same transformation to the ictal image.
03. Standardization of the intensity and execution of the subtraction.
04. Generation of SISCOM maps by applying 1.5, 2, 2.5 and 3 standard deviation filters.

[1]Newey, C. R., Wong, C. , Irene Wang, Z. , Chen, X. , Wu, G. and Alexopoulos, A. V. (2013), Optimizing SPECT SISCOM analysis to localize seizure-onset zone by using varying z scores. Epilepsia, 54: 793-800.

[2]Tong Chen, Liang Guo (2016) The role of SISCOM in preoperative evaluation for patients with epilepsy surgery: A meta-analysis, Seizure, 41, 2016, 43-50.