Neuraceq[™] (florbetaben F18 injection) Image Interpretation STEP-BY-STEP

Negative Scan



Cerebellum

Lateral temporal lobes

Contrast between white (arrows) and gray matter. Note: cerebellar gray/white contrast is maintained in both positive and negative scans Spiculated or "mountainous" white matter (arrows); tracer uptake does not reach outer rim of brain (dashed line)

Frontal lobes

Spiculated white matter (arrows)

Posterior cingulate/ Precuneus

Hypo-intense "hole" (circle) adjacent and posterior to splenium (arrow)

Parietal lobes

Easily identified midline (long arrow), spiculated appearance of white matter (short arrows), low signal near outer rim (dashed line)

Positive Scan



Cerebellum

Contrast between white (arrows) and gray matter; Extracerebral tracer uptake in scalp and posterior sagittal sinus (arrowhead) can be seen

n Lateral temporal lobes

"Plumped", smooth appearance of outer border of brain parenchyma (dashed line)

Frontal lobes

"Plumped" smooth appearance (dashed line)

Posterior cingulate/ Precuneus

"Hole" is "filled-up" (circle) posterior to splenium (arrow)

Parietal lobes

Much thinner midline (long arrow), cortical areas are "filled-up" and smooth (dashed line)



Neuraceq[™] (florbetaben F18 injection) **Image Interpretation** STEP-BY-STEP

	Steps for Reading Neuraceq Scans
STEP 1	Assess technical quality
	 Check and confirm injected dose and time of scan post injection.
	 Scroll through the axial slices for an overall technical quality assessment of the scan.
STEP 2	Set up Image display
	 Display images in axial orientation using a gray or inverse gray scale.
	 Set the threshold window using the cerebellar white/gray contrast.
STEP 3	Assess all regions systematically
	 View and assess all regions in a systematic manner, starting with the cerebellum and scrolling up through the lateral temporal and frontal lobes, the posterior cingulate cortex/precuneus, and the parietal lobes.
	 Target intensity rule: Compare the activity in cortical gray matter with activity in adjacent white matter and 'target intensity', the area of highest white matter uptake in the slice.
	 Majority slice rule: To be assessed as showing 'tracer uptake', the majority of slices from the respective region must be affected.
STEP 4	Overall impression: either " β -amyloid negative" or " β -amyloid positive"
	 β-amyloid negative: Tracer uptake (i.e., signal intensity) in gray matter is lower than in white matter in all four brain regions (none to sparse β-amyloid deposition).
	 β-amyloid positive: A large confluent area or smaller area(s) of tracer uptake equal to or higher than that present in white matter extending beyond the white matter rim to the outer cortical margin.
	— Within at least one of the four brain regions.

- Involving the **majority of the slices** in the affected region.

Difficult Neuraceq Scans

Difficult scans:

- Some scans may be difficult to interpret due to image noise, atrophy with a thinned cortex, or image blur.
- If a co-registered computerized tomography (CT) image is available, the CT image may be used to clarify the relationship of the florbetaben F 18 uptake and the gray matter anatomy.

For assistance:

 For technical assistance and interpretative methodology: medicalaffairs@life-mi.com



See the Neuraceq Package Insert for full Prescribing Information and Important Safety Information: http://neuraceq.com/images/Neuraceq_PI.pdf

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