



# Neuroreader® 2.7.0 – Quick Reference Card

The Neuroreader® Report is a customizable and automated volumetric report, which can be used to guide clinical decision-making. The Neuroreader® Report features the volume of 64 brain structures along with color coded overlay images that are valuable for quality assessment. It also features heat maps, a visual aid that highlights the affected areas of the brain for both physicians and patients. Neuroreader® 2.7.0 also includes heat maps, charts depicting brain volumes and longitudinal charts, which allow the physicians to see an evaluation and progression of the patient's data over time. All features add value to the physicians precision when reporting to the patients and aid with giving the patients the most accurate results and treatment plans.

**NEUROREADER®** R E P O R T

Analysis Date: 2022-Aug-01 11:07:16  
 Report Type: Neuroreader® Report  
 NR Upload ID: BrB\_20220801\_012  
 Group Name: DEMO  
 Study ID:  
 Patient ID: 45536

Patient Name: Accession Number: 01-01-1  
 Birth Date: Gender: Male  
 Age: 72

**Reference Head Size**  
 The measured total intracranial volume (mTIV) 2118 mL

**Left-Right Asymmetry Index**

Structures	Asymmetry Index	NR Index*	Zscore	Percentile
Hippocampus	0.063918	11.64	0.77	77.81
Amygdala	-0.021099	1.92	0.13	55.03
Caudate	0.102133	15.84	1.04	85.13
Lateral Ventricle	0.109361	0.88	0.06	52.30
Pallidum	-0.013062	-8.09	-0.53	29.73
Putamen	0.016906	-1.56	-0.10	45.91
Thalamus	0.122106	-26.54	-1.75	4.04
Ventral Diencephalon	0.090235	1.89	0.12	54.95
Cerebellum	0.002228	5.40	0.22	58.84
Frontal Lobe	-0.005513	-2.00	-0.13	44.77
Parietal Lobe	-0.023012	-7.58	-0.50	30.91
Occipital Lobe	0.035018	0.96	0.06	52.52
Temporal Lobe	-0.041678	-6.47	-0.43	33.50

**Brain Volume Assessment**

Structures	Color	Vol mL	Vol/mTIV in (%)	NR Index*	Zscore	Percentile
Whole Brain Matter	n/a	1107.24	52.29	-8.07	-0.53	29.78
Gray Matter	n/a	552.00	26.07	-7.31	-0.48	31.52
White Matter	n/a	555.24	26.22	0.35	0.02	50.93

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**Reference Head Size**  
 This corresponds to the measured Total Intracranial Volume (mTIV) in mL. The mTIV/Reference Head Size is displayed separately from the other structures since it is used as the reference volume on which the statistical values are based.

**Left-right Asymmetry Index**  
 This table lists the Left-Right asymmetry index, Neuroreader® Index (NR Index), the Z-score, and the Percentile for all structures that are on both sides of the brain. You can order the Left-Right Asymmetry Index in an separate Asymmetry Report for Neuroreader® 2.7.0, totaling 26 structures. In the customizable report you can also include all asymmetry structures.

**Brain Volume Assessment**  
 The Brain Volume Assessment table compares 64 brain structures to the normative database and provides the percentile for all 64 structures. In the customizable report you can get up to 83 volumes (it includes Left/Right of the Gray and White Matter) and you can choose which volumes you want displayed.

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**Brain Heat Maps**

Statistical percentile for each brain structure shown in a color gradient. The orange color scale indicates all brain matter volumes with a low percentile and all CSF and ventricular structures with a high percentile.

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**Brain Heat Maps**  
 Heat maps is a visual aid for patients and physicians that highlights the affected areas of the brain.

**Brain Segmentation Color Table**  
 The color table is used as a reference table for the segmentation shown in the Brain Volume Assessment table and in the Quality Assessment Overlay Images to help visualize the different structures.

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**Brain Segmentation Color Table**  
 (The Brain Segmentation Color Table contains the color codes and IDs of the overlays used for the segmentation overlay images. See Neuroreader manual for more information.)

ID	Color	Label	Red	Green	Blue
53	Green	Right Hippocampus	0	255	0
17	Blue	Left Hippocampus	0	0	255
54	Yellow	Right Amygdala	255	255	0
18	Cyan	Left Amygdala	0	255	255
51	Magenta	Right Putamen	255	0	255
12	Orange	Left Putamen	255	128	0
49	Light Green	Right Thalamus	128	255	0
10	Light Blue	Left Thalamus	0	255	128
60	Light Purple	Right Ventral Diencephalon	0	128	255
28	Light Blue	Left Ventral Diencephalon	255	0	128
52	Purple	Right Pallidum	128	0	255
13	Light Purple	Left Pallidum	128	0	0
50	Light Green	Right Caudate	0	128	0
11	Light Blue	Left Caudate	0	0	128
16	Light Yellow	Brain Stem	255	255	128
303	Light Purple	Right Frontal Lobe GM	128	255	255
302	Light Purple	Left Frontal Lobe GM	255	128	255
313	Light Purple	Right Frontal Lobe WM	128	128	0
312	Light Purple	Left Frontal Lobe WM	0	128	128
305	Light Purple	Right Parietal Lobe GM	128	0	128
304	Light Purple	Left Parietal Lobe GM	255	128	128
315	Light Purple	Right Parietal Lobe WM	128	255	128
314	Light Purple	Left Parietal Lobe WM	128	128	255
307	Light Purple	Right Occipital Lobe GM	192	64	64
306	Light Purple	Left Occipital Lobe GM	64	192	64
317	Light Purple	Right Occipital Lobe WM	64	64	192
316	Light Purple	Left Occipital Lobe WM	64	192	192
309	Light Purple	Right Temporal Lobe GM	192	64	192
308	Light Purple	Left Temporal Lobe GM	192	192	64
319	Light Purple	Right Temporal Lobe WM	255	64	64
318	Light Purple	Left Temporal Lobe WM	255	64	192
47	Light Purple	Right Cerebellar GM	255	192	64
8	Light Purple	Left Cerebellar GM	255	192	192
46	Light Purple	Right Cerebellar WM	64	64	255
7	Light Purple	Left Cerebellar WM	64	192	255
24	Light Purple	CSF (n. dorsal)	192	64	255
43	Light Purple	Right Lateral Ventricle	192	192	255
4	Light Purple	Left Lateral Ventricle	192	255	192

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