

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

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

## Reference Head Size

The measured total intracranial volume (mTIV)	2118 mL
---	---------

## Left-Right Asymmetry Index

Structures	Asymmetry Index	NR Index*	Z-score	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	0.000205	1.89	0.12	54.95
Cerebellum	0.002228	3.40	0.22	58.84
Cerebellar GM	0.103730	5.99	0.39	65.33
Cerebellar WM	-0.192722	-4.08	-0.27	39.42
Cerebrum	-0.013375	-8.52	-0.56	28.76
Cerebral WM	0.054708	3.17	0.21	58.26
Cerebral GM	-0.087726	-13.41	-0.88	18.87
Frontal Lobe	-0.005513	-2.00	-0.13	44.77
Frontal Lobe GM	0.011104	1.41	0.09	53.68
Frontal Lobe WM	-0.020523	-2.31	-0.15	43.97
Parietal Lobe	-0.023012	-7.58	-0.50	30.91
Parietal Lobe GM	-0.237389	-15.02	-0.99	16.16
Parietal Lobe WM	0.153517	3.91	0.26	60.15
Occipital Lobe	0.035018	0.96	0.06	52.52

Occipital Lobe GM	-0.163309	-11.59	-0.76	22.29
Occipital Lobe WM	0.177715	13.59	0.89	81.43
Temporal Lobe	-0.041678	-6.47	-0.43	33.50
Temporal Lobe GM	-0.097643	-11.49	-0.76	22.48
Temporal Lobe WM	0.024045	2.84	0.19	57.40

## Brain Volume Assessment

Structures	Color	Vol mL	Vol/mTIV in (%)	NR Index*	Z-score	Percentile
Gray Matter	n/a	552.00	26.07	-7.31	-0.48	31.52
Hippocampus	n/a	<b>6.60</b>	<b>0.31</b>	<b>-16.63</b>	<b>-1.09</b>	<b>13.69</b>
Right Hippocampus		<b>3.19</b>	<b>0.15</b>	<b>-18.03</b>	<b>-1.19</b>	<b>11.77</b>
Left Hippocampus		<b>3.41</b>	<b>0.16</b>	<b>-14.24</b>	<b>-0.94</b>	<b>17.43</b>
Frontal Lobe	n/a	382.64	18.07	-8.57	-0.56	28.64
Right Frontal Lobe	n/a	191.85	9.06	-8.19	-0.54	29.50
Right Frontal Lobe GM		90.30	4.26	-5.50	-0.36	35.88
Right Frontal Lobe WM		101.55	4.80	-1.30	-0.09	46.60
Left Frontal Lobe	n/a	190.79	9.01	-8.76	-0.58	28.21
Left Frontal Lobe GM		91.31	4.31	-4.88	-0.32	37.40
Left Frontal Lobe WM		99.49	4.70	-2.24	-0.15	44.15
Parietal Lobe	n/a	205.05	9.68	-4.02	-0.26	39.58
Right Parietal Lobe	n/a	103.70	4.90	-2.11	-0.14	44.48
Right Parietal Lobe GM		51.79	2.45	2.04	0.13	55.33
Right Parietal Lobe WM		51.91	2.45	-3.65	-0.24	40.50
Left Parietal Lobe	n/a	101.34	4.79	-5.68	-0.37	35.44
Left Parietal Lobe GM		40.80	1.93	-9.22	-0.61	27.20
Left Parietal Lobe WM		60.54	2.86	3.17	0.21	58.26
Occipital Lobe	n/a	95.48	4.51	-6.11	-0.40	34.39
Right Occipital Lobe	n/a	46.90	2.21	-6.26	-0.41	34.01
Right Occipital Lobe GM		21.61	1.02	-2.65	-0.17	43.09
Right Occipital Lobe WM		25.30	1.19	-6.30	-0.41	33.93

Structures	Color	Vol mL	Vol/mTIV in (%)	NR Index*	Z-score	Percentile
<b>Left Occipital Lobe</b>	n/a	48.57	2.29	-4.94	-0.33	37.25
<b>Left Occipital Lobe GM</b>		<b>18.34</b>	<b>0.87</b>	<b>-10.87</b>	<b>-0.72</b>	<b>23.73</b>
<b>Left Occipital Lobe WM</b>		30.23	1.43	5.69	0.37	64.61
<b>Temporal Lobe</b>	n/a	<b>199.71</b>	<b>9.43</b>	<b>-15.56</b>	<b>-1.02</b>	<b>15.29</b>
<b>Right Temporal Lobe</b>	n/a	<b>101.94</b>	<b>4.81</b>	<b>-13.89</b>	<b>-0.91</b>	<b>18.04</b>
<b>Right Temporal Lobe GM</b>		56.56	2.67	-8.24	-0.54	29.39
<b>Right Temporal Lobe WM</b>		45.37	2.14	-4.62	-0.30	38.07
<b>Left Temporal Lobe</b>	n/a	<b>97.78</b>	<b>4.62</b>	<b>-16.32</b>	<b>-1.07</b>	<b>14.14</b>
<b>Left Temporal Lobe GM</b>		<b>51.30</b>	<b>2.42</b>	<b>-12.98</b>	<b>-0.85</b>	<b>19.65</b>
<b>Left Temporal Lobe WM</b>		46.48	2.19	-2.98	-0.20	42.24
<b>Lateral Ventricle</b>	n/a	<b>106.05</b>	<b>5.01</b>	<b>28.30</b>	<b>1.86</b>	<b>96.87</b>
<b>Right Lateral Ventricle</b>		<b>50.12</b>	<b>2.37</b>	<b>26.76</b>	<b>1.76</b>	<b>96.08</b>
<b>Left Lateral Ventricle</b>		<b>55.92</b>	<b>2.64</b>	<b>28.20</b>	<b>1.86</b>	<b>96.82</b>

Text with **orange** color: All brain matter volumes with a percentile lower than 25% and all CSF structures with a percentile over 75%.

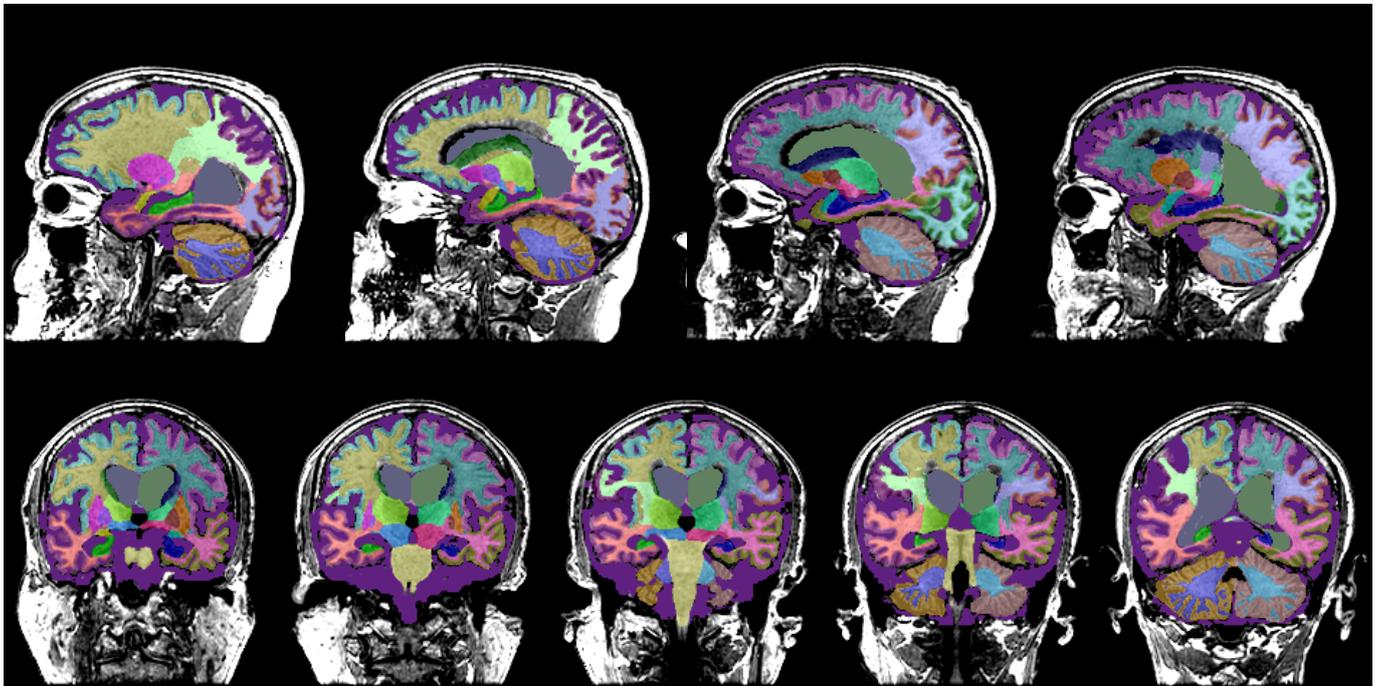
\*) NR Index: Neuroreader® Index

## Summary

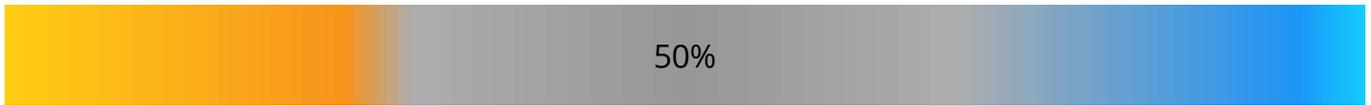
All brain matter volumes with a percentile lower than 25% and all CSF structures with a percentile over 75% (orange font):

- Hippocampus (13.69%)
- Right Hippocampus (11.77%)
- Left Hippocampus (17.43%)
- Temporal Lobe (15.29%)
- Right Temporal Lobe (18.04%)
- Left Temporal Lobe (14.14%)
- Left Occipital Lobe GM (23.73%)
- Left Temporal Lobe GM (19.65%)
  
- Lateral Ventricle (96.87%)
- Right Lateral Ventricle (96.08%)
- Left Lateral Ventricle (96.82%)

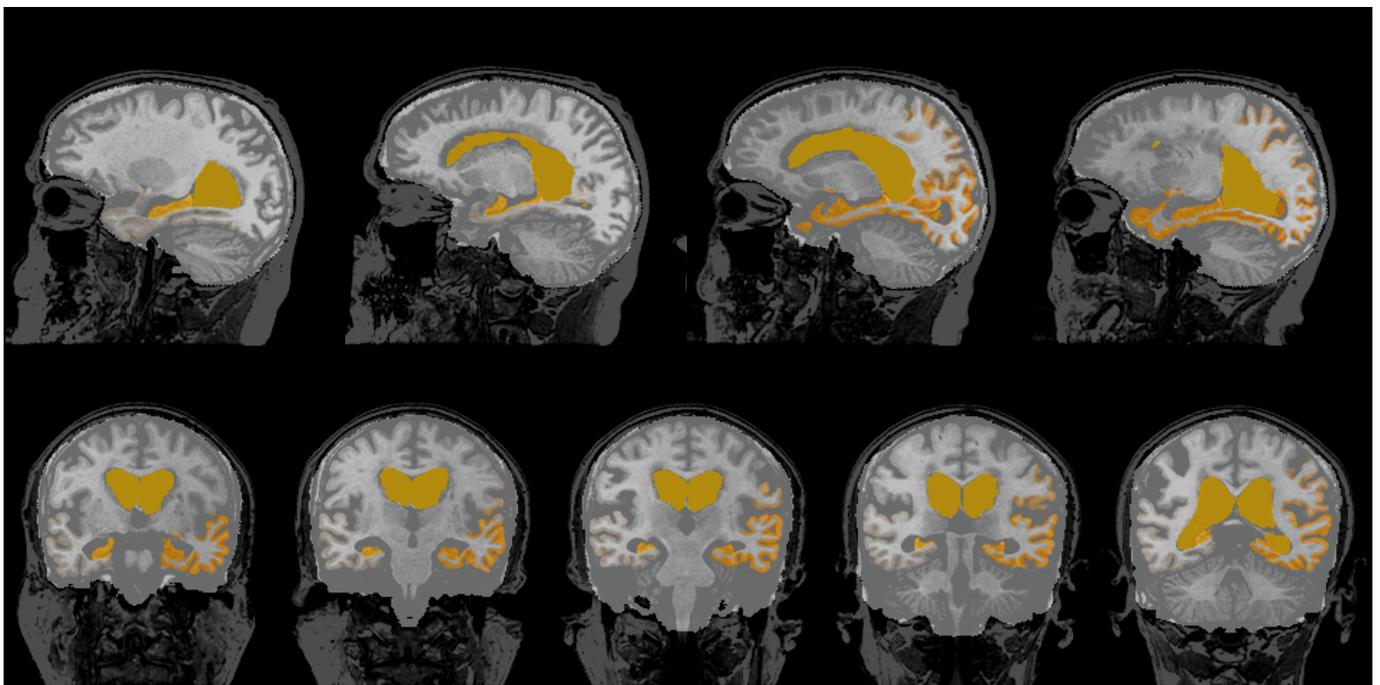
## Quality Assessment Overlay Images



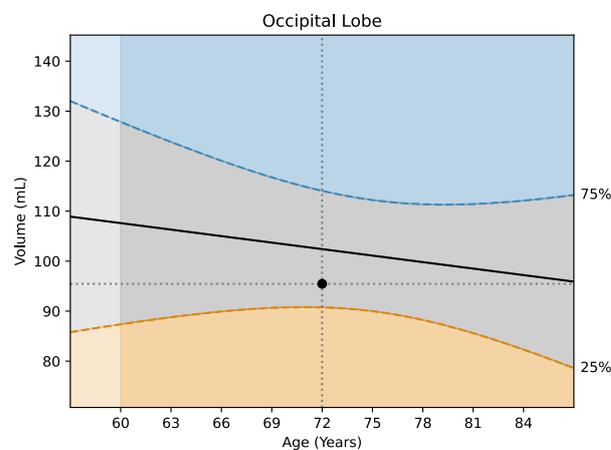
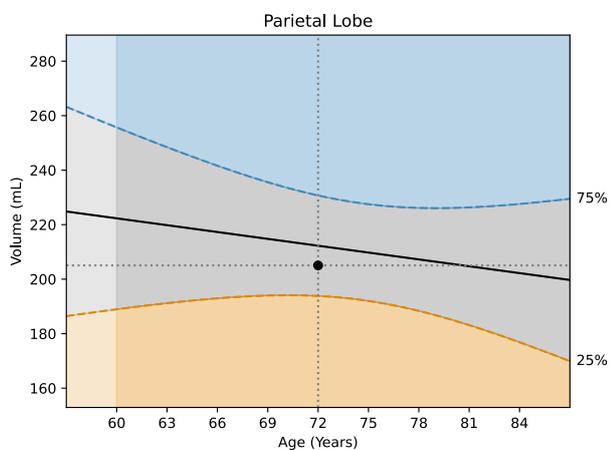
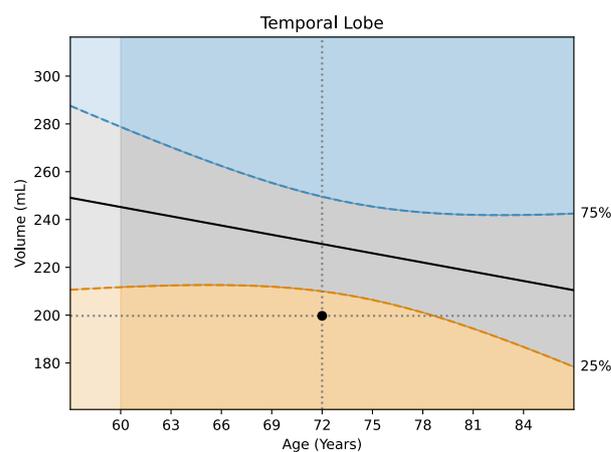
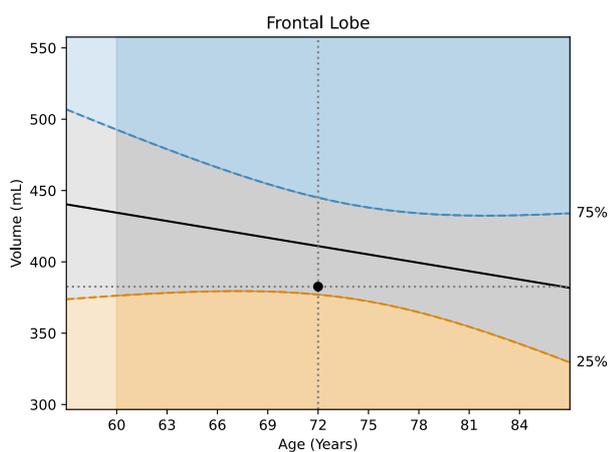
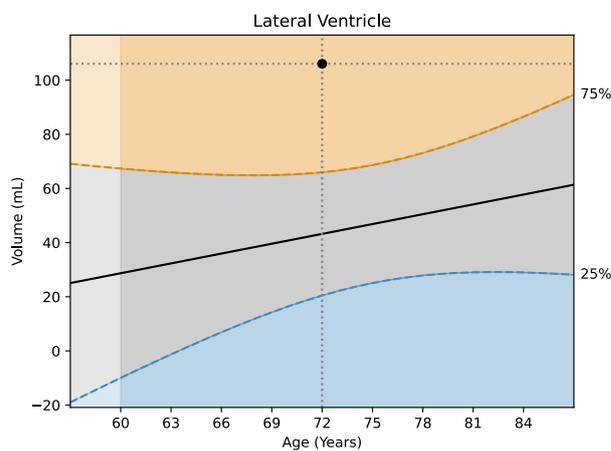
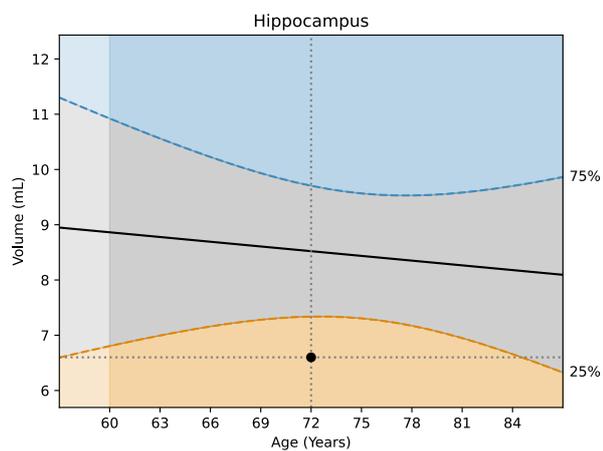
## Brain Heat Maps



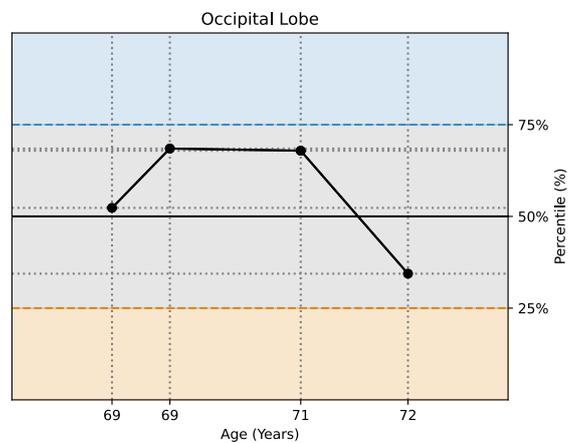
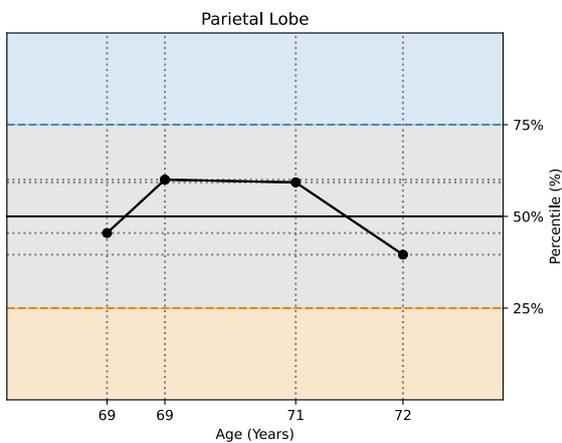
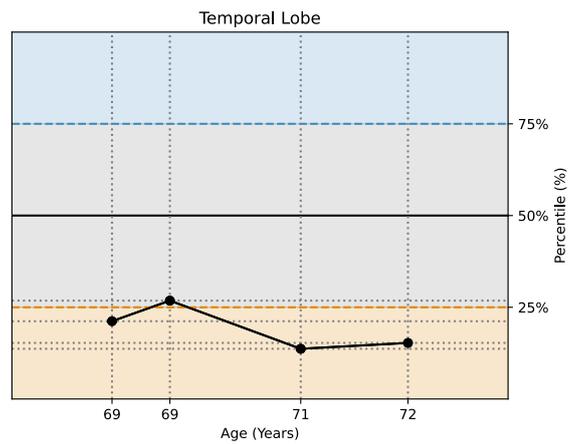
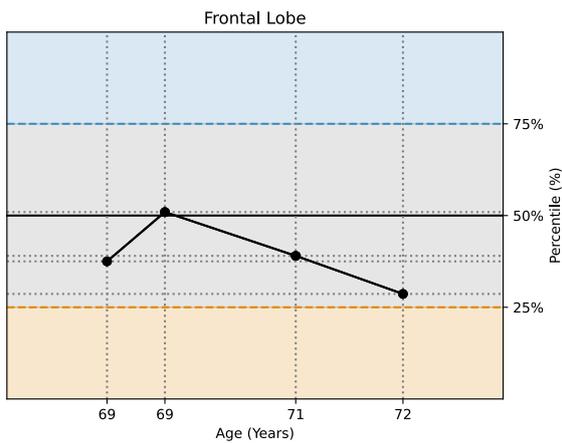
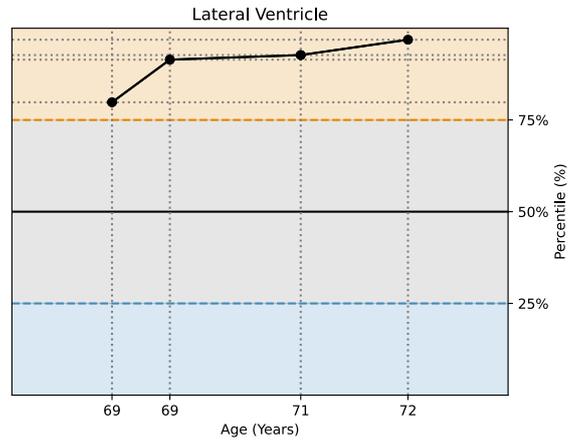
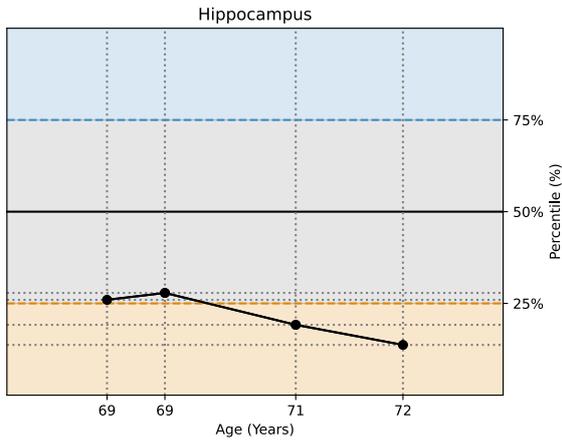
Statistical percentile for each brain structure shown in a color gradient. The orange color scale indicates all brain matter volumes with a low percentile and all CSF and ventricular structures with a high percentile.



# Charts

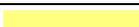


# Longitudinal Charts



# 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)

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