

SUPPLEMENTAL

eTable 1. Verbal and visuospatial memory indices and associated neuroanatomic structures

Cognitive Domain	Test and Score	Structure Volume	Adjacent Subcortical WM	Laterality
Verbal Memory	HVLT-R Total Recall HVLT-R Delayed Recall	Hippocampus	Entorhinal Parahippocampal Temporal pole	Left
Visuospatial Memory	BVMT-R Total Recall BVMT-R Delayed Recall	Hippocampus	Entorhinal Parahippocampal Temporal pole	Right

Abbreviations: HVLT-R, Hopkins Verbal Learning Test-Revised; BVMT-R, Brief Visuospatial

Memory Test-Revised; WM, white matter

These regions of interest (ROIs) were based on prior research implicating their role in the associated neurocognitive domains.

eTable 2a. Missing data on longitudinal follow-up (N=27)

Missing Imaging^a	Patients, No. (%)
Baseline	2 (7.7%)
3 months	1 (3.8%)
6 months	1 (3.8%)
12 months	9 (34.6%)
Missing NCA	Patients, No. (%)
Baseline	0 (0.0%)
3 months	3 (11.5%)
6 months	2 (7.7%)
12 months	8 (30.8%)
Missing Both^b	Patients, No. (%)
Baseline	0 (0.0%)
3 months	0 (0.0%)
6 months	0 (0.0%)
12 months	4 (15.4%)

^a2 patients are missing 2 imaging time points (ID 45: 3 and 12; ID 4: 6 and 12)

^b4 patients with both missing time points at 12 months for various reasons (1 dropped, 1 missing data point, 2 not yet tested)

Abbreviations: NCA, neurocognitive assessment

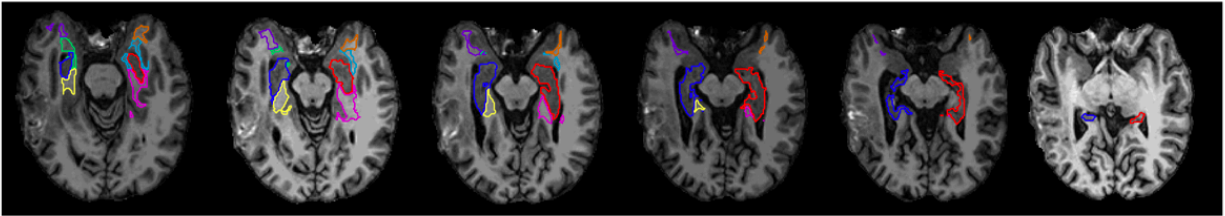
eTable 2b. Differences in patient characteristics between subjects with and without missing data (N=27)

	Imaging	NCA
Demographic		
Gender	.863	.930
Race	.513	.369
Age	.939	.057
Education	.006*	.912
Cancer or Treatment Characteristic		
Glioma	.883	.013*
Proton Beam Therapy	.228	.895
Chemotherapy		
Concurrent	.842	.310
Adjuvant	.581	.048*
Steroids	.085	.484
Seizures	.547	.930

P-value from Pearson chi-square (categorical) and independent samples t-test (continuous) between missing and no missing follow-up time points. *Significant at two-sided level $P < .05$.

Abbreviations: NCA, neurocognitive assessment

eFigure 1

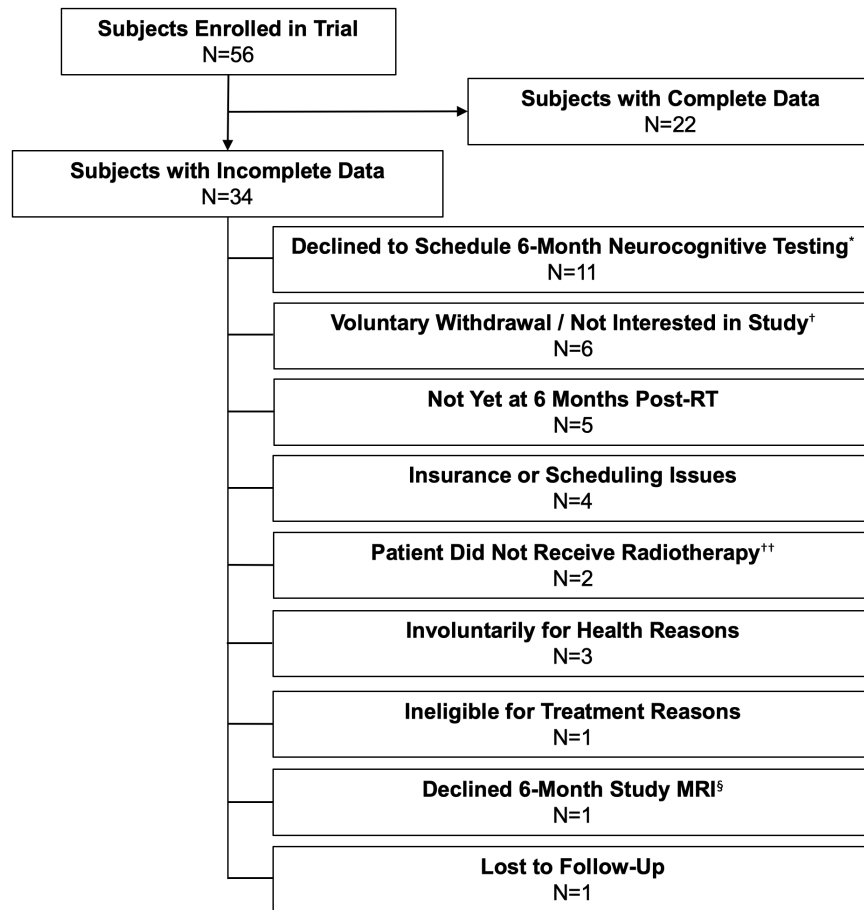


Color key:

Red = left hippocampus
Aqua blue = left entorhinal
Pink = left parahippocampal
Orange = left temporal

Dark blue = right hippocampus
Green = right entorhinal
Yellow = right parahippocampal
Purple = right temporal

eFigure 2



eFigure 3

