

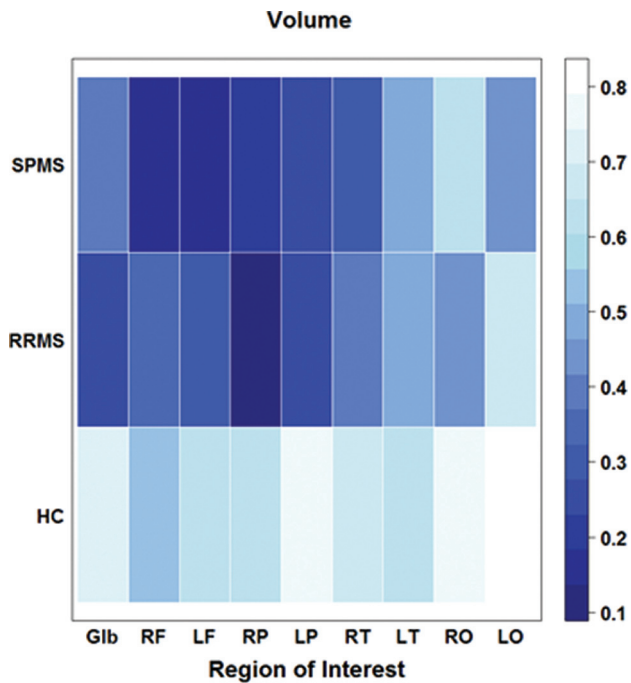
On-line Table: Relationship between cGM and NAWM regional perfusion data, between GM and T2h-l regional perfusion data, and between lobar cGM and lobar NAWM volume data for HCs and subjects with RMS and SPMS after adjusting for confounding factors^a

Group and Region	Relationship between cGM and NAWM Regional Perfusion						Relationship between cGM and T2h-l Regional Perfusion						Relationship between NAWM and T2h-l Regional Perfusion						Relationship between Lobar cGM and NAWM Regional Volume		
	CBF			CBV			MTT			CBF			CBV			MTT			R ²	P Value	
	R ²	P Value	R ²	P Value	R ²	P Value	R ²	P Value	R ²	P Value	R ²	P Value	R ²	P Value	R ²	P Value					
HC	Global	0.957	<.0001 ^b	0.962	<.0001 ^b	0.967	<.0001 ^b	0.015	NA	0.005	NA	0.006	NA	0.001	NA	0	NA	0.003	NA	0.728	.0002
	Frontal, R	0.912	<.0001 ^b	0.946	<.0001 ^b	0.949	<.0001 ^b	0.017	NA	0.015	NA	0	NA	0.006	NA	0.007	NA	0	NA	0.525	.0028
	Frontal, L	0.898	<.0001 ^b	0.959	<.0001 ^b	0.91	<.0001 ^b	0.034	NA	0.024	NA	0.001	NA	0.007	NA	0.005	NA	0	NA	0.612	.0009
	Parietal, R	0.903	<.0001 ^b	0.933	<.0001 ^b	0.933	<.0001 ^b	0.007	NA	0.002	NA	0.004	NA	0	NA	0	NA	0	NA	0.643	.0008
	Parietal, L	0.935	<.0001 ^b	0.945	<.0001 ^b	0.928	<.0001 ^b	0.013	NA	0.01	NA	0.001	NA	0	NA	0	NA	0	NA	0.785	<.0001 ^b
	Temporal, R	0.918	<.0001 ^b	0.905	<.0001 ^b	0.96	<.0001 ^b	0.001	NA	0	NA	0.003	NA	0.001	NA	0.004	NA	0.007	NA	0.673	.0005
	Temporal, L	0.769	<.0001 ^b	0.877	<.0001 ^b	0.95	<.0001 ^b	0.011	NA	0.005	NA	0.006	NA	0.001	NA	0	NA	0.003	NA	0.643	.001
	Occipital, R	0.908	<.0001 ^b	0.93	<.0001 ^b	0.976	<.0001 ^b	0.032	NA	0.004	NA	0.026	NA	0.001	NA	0.004	NA	0.017	NA	0.787	<.0001 ^b
	Occipital, L	0.934	<.0001 ^b	0.938	<.0001 ^b	0.959	<.0001 ^b	0.02	NA	0.002	NA	0.016	NA	0.002	NA	0.008	NA	0.006	NA	0.791	<.0001 ^b
RMS	Global	0.957	<.0001 ^b	0.934	<.0001 ^b	0.941	<.0001 ^b	0.609	0.006	0.337	0.076	0.171	0.203	0.687	0.001 ^b	0.461	0.064	0.224	0.0751	0.243	1816
	Frontal, R	0.928	<.0001 ^b	0.898	<.0001 ^b	0.942	<.0001 ^b	0.532	0.018	0.687	0.001 ^b	0.334	0.033	0.537	0.016	0.643	0.003	0.386	0.03	0.334	3466
	Frontal, L	0.94	<.0001 ^b	0.925	<.0001 ^b	0.951	<.0001 ^b	0.094	0.5388	0.105	0.7885	0.078	0.4339	0.091	0.3898	0.078	0.5776	0.13	0.215	0.284	3139
	Parietal, R	0.935	<.0001 ^b	0.881	<.0001 ^b	0.87	<.0001 ^b	0.464	0.053	0.537	0.019	0.112	0.426	0.524	0.027	0.633	0.006	0.193	0.1057	0.135	3923
	Parietal, L	0.947	<.0001 ^b	0.952	<.0001 ^b	0.86	<.0001 ^b	0.068	0.8027	0.083	0.9232	0.076	0.756	0.09	0.7498	0.111	0.7182	0.118	0.2304	0.234	1379
	Temporal, R	0.944	<.0001 ^b	0.897	<.0001 ^b	0.915	<.0001 ^b	0.078	0.3904	0.072	0.3912	0.093	0.7074	0.153	0.241	0.161	0.199	0.017	0.8927	0.389	0.337
	Temporal, L	0.982	<.0001 ^b	0.978	<.0001 ^b	0.876	<.0001 ^b	0.073	0.6998	0.064	0.9999	0.061	0.8038	0.063	0.6522	0.057	0.9999	0.088	0.3333	0.482	0.248
	Occipital, R	0.844	<.0001 ^b	0.807	<.0001 ^b	0.966	<.0001 ^b	0.172	0.2855	0.116	0.3641	0.076	0.6229	0.135	0.4273	0.21	0.1222	0.077	0.3821	0.462	0.106
	Occipital, L	0.892	<.0001 ^b	0.905	<.0001 ^b	0.969	<.0001 ^b	0.134	0.4168	0.098	0.4261	0.454	0.0074	0.133	0.3579	0.163	0.2519	0.522	0.0018	0.654	.0006
SPMS	Global	0.961	<.0001 ^b	0.956	<.0001 ^b	0.977	<.0001 ^b	0.694	<.0001 ^b	0.423	0.075	0.699	0.003	0.752	<.0001 ^b	0.516	0.041	0.701	0.002 ^b	0.394	2388
	Frontal, R	0.944	<.0001 ^b	0.929	<.0001 ^b	0.923	<.0001 ^b	0.489	0.059	0.186	0.1723	0.294	.22	0.67	0.003	0.297	0.0593	0.289	0.1336	0.179	6434
	Frontal, L	0.94	<.0001 ^b	0.931	<.0001 ^b	0.941	<.0001 ^b	0.634	0.004	0.293	0.0392	0.616	0.018	0.703	0.001 ^b	0.32	0.042	0.671	0.006	0.159	6728
	Parietal, R	0.951	<.0001 ^b	0.949	<.0001 ^b	0.925	<.0001 ^b	0.414	0.042	0.513	0.024	0.593	0.022	0.401	0.021	0.534	0.023	0.472	0.0078	0.218	2349
	Parietal, L	0.925	<.0001 ^b	0.908	<.0001 ^b	0.951	<.0001 ^b	0.539	0.045	0.209	0.1705	0.472	0.287	0.555	0.03	0.26	0.0928	0.582	0.047	0.237	1695
	Temporal, R	0.937	<.0001 ^b	0.887	<.0001 ^b	0.917	<.0001 ^b	0.603	0.086	0.524	0.094	0.898	<.0001 ^b	0.689	0.015	0.725	0.015	0.872	<.0001 ^b	0.304	3312
	Temporal, L	0.849	<.0001 ^b	0.903	<.0001 ^b	0.958	<.0001 ^b	0.678	0.023	0.427	0.0871	0.826	0.003	0.842	<.0001 ^b	0.547	0.0229	0.872	<.0001 ^b	0.477	5079
	Occipital, R	0.915	<.0001 ^b	0.9	<.0001 ^b	0.984	<.0001 ^b	0.765	0.051	0.739	0.035	0.884	0.008	0.845	0.024	0.859	0.035	0.878	0.008	0.622	3684
	Occipital, L	0.906	<.0001 ^b	0.936	<.0001 ^b	0.959	<.0001 ^b	0.306	0.1756	0.437	0.1732	0.879	0.006	0.346	.26	0.585	0.521	0.875	0.006	0.458	3448

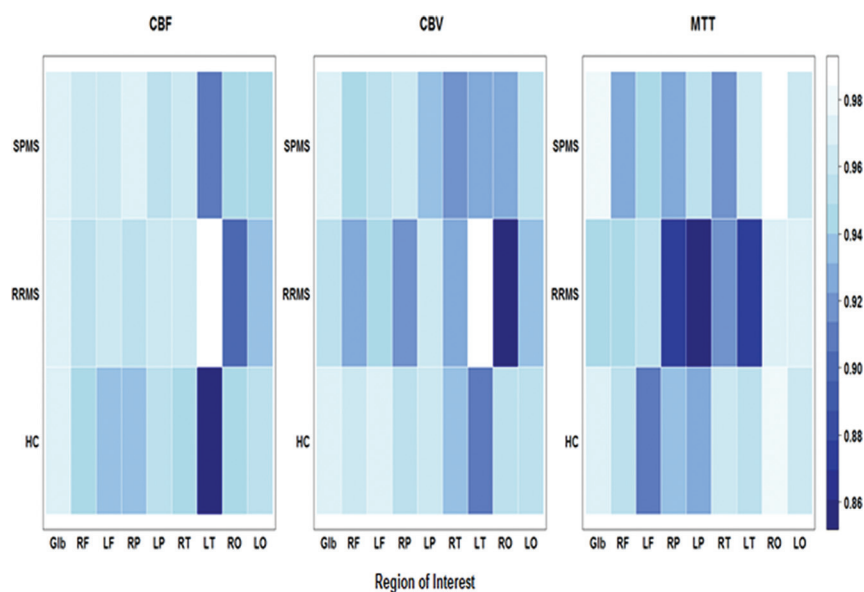
Note:—NA indicates that the perfusion data was zero for T2h-l in HC subjects; therefore, the P value of T2h-l was not available in the model; R, right; L, left.

^a The R² was obtained in the model of cGM regional perfusion data with confounding factors only. P value < .00018 (.05/270) was considered significant.

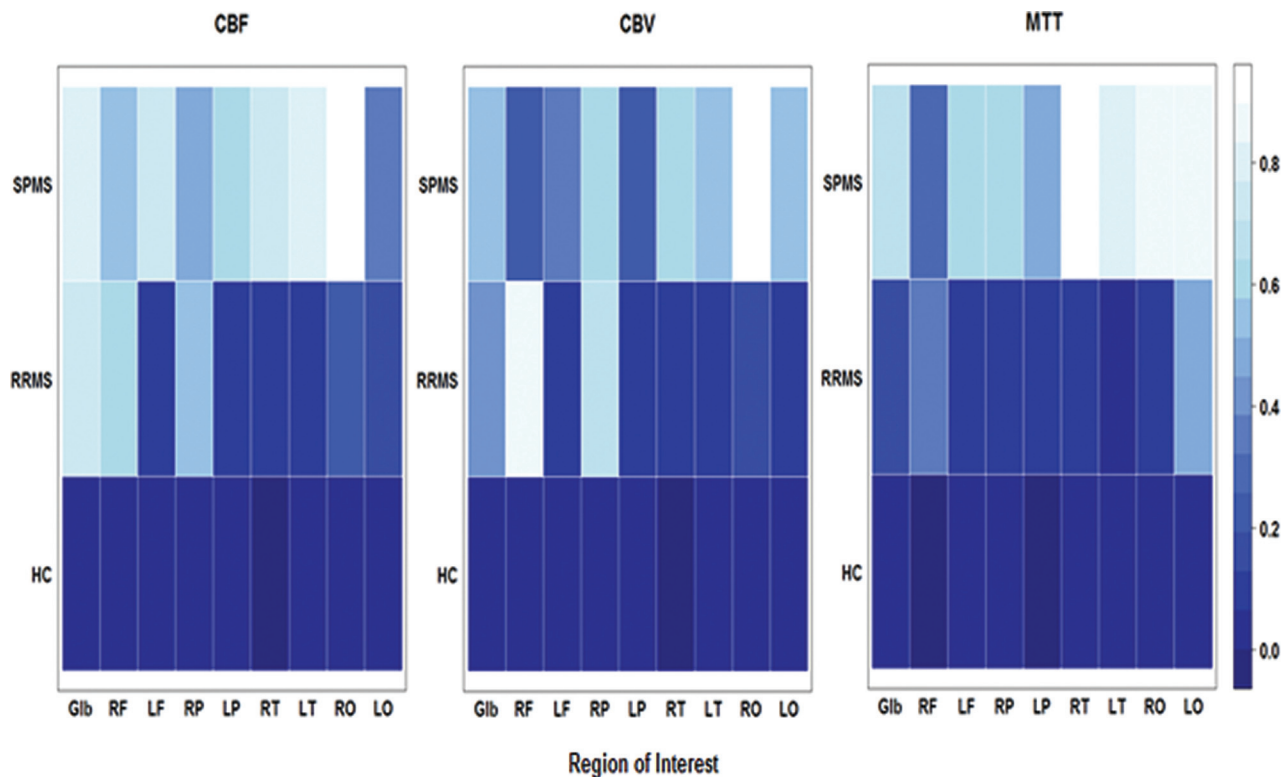
^b Significant.



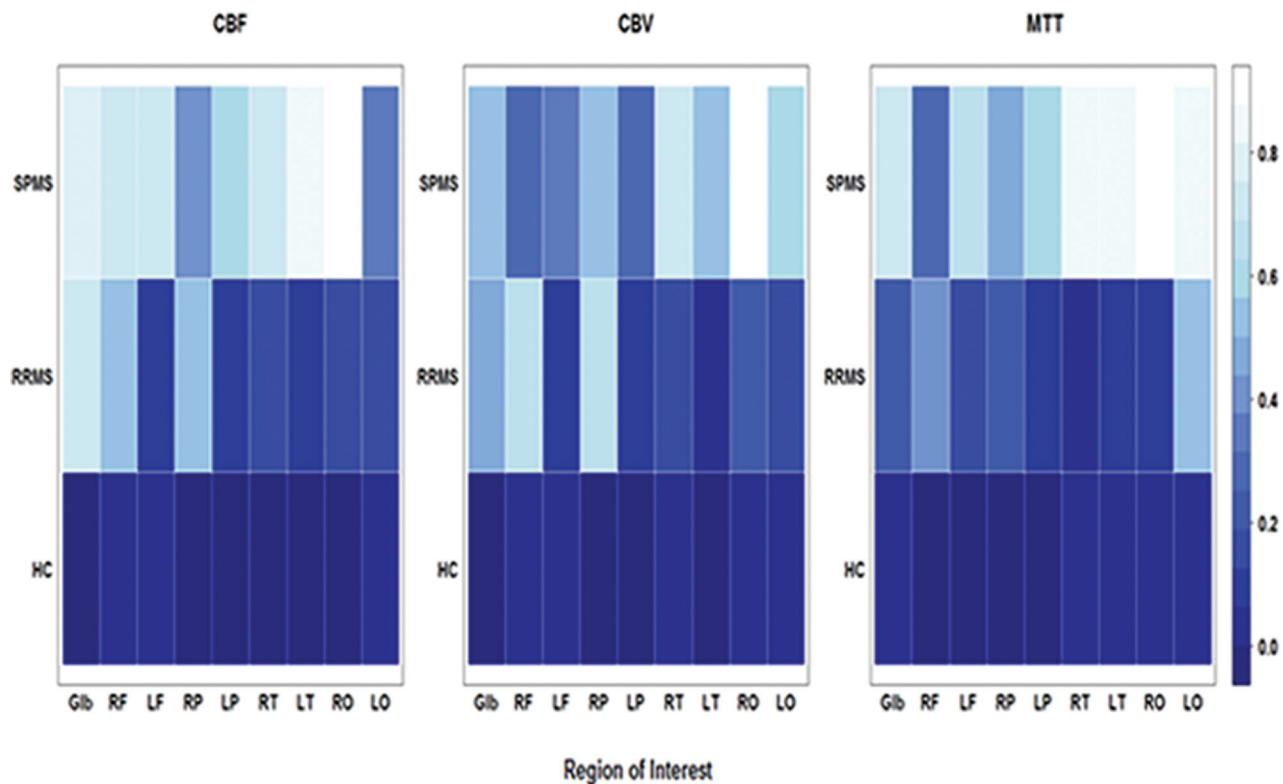
ON-LINE FIG 1. Association between cGM and NAWM global and lobar volumes (cubic centimeter). *P* value strength is represented by the y-axis. Actual coefficients are provided in the On-line Table.



ON-LINE FIG 2. Graphic depiction of the strength of the association between global and lobar NAWM and cGM perfusion. *P* value strength is represented by the y-axis. Actual coefficients are provided in the On-line Table. Units for CBF are milliliter/100 gram/minute; CBV, milliliter/100 gram; MTT, second.



ON-LINE FIG 3. Graphic depiction of the strength of the association between global and lobar T2h-l and cGM perfusion. *P* value strength is represented by the y-axis. Actual coefficients are provided in the On-line Table. Units for CBF are milliliter/100 gram/minute; CBV, milliliter/100 gram; MTT, second.



ON-LINE FIG 4. Graphic depiction of the strength of the association between global and lobar T2h-l and NAWM perfusion. *P* value strength is represented by the y-axis. Actual coefficients are provided in the On-line Table. Units for CBF are milliliter/100 gram/minute; CBV, milliliter/100 gram; MTT, second.