Table S1. AAL90 complete correlations, p-values, and FDR for IC2.

	IC2														
	CBF			Fp			Ff			Fs			Ds		
ROI	ϱ	p	FDR	ϱ	p	FDR	ϱ	p	FDR	ϱ	p	FDR	ϱ	p	FDR
Amygdala L	0.484	0.001	0.002	0.234	0.130	0.244	-0.088	0.574	0.942	-0.093	0.554	0.813	-0.057	0.718	0.972
Amygdala R	0.501	0.001	0.001	0.048	0.761	0.848	-0.029	0.855	0.942	-0.006	0.971	0.983	-0.139	0.373	0.865
Angular L	0.507	0.001	0.001	0.419	0.005	0.030	0.207	0.184	0.942	-0.455	0.002	0.038	0.298	0.052	0.439
Angular R	0.633	<0.001	<0.001	0.501	0.001	0.011	-0.022	0.887	0.942	-0.437	0.003	0.043	0.368	0.015	0.439
Calcarine L	0.375	0.013	0.015	0.444	0.003	0.025	0.228	0.141	0.942	-0.421	0.005	0.054	0.301	0.050	0.439
Calcarine R	0.290	0.059	0.061	0.435	0.004	0.025	0.137	0.382	0.942	-0.341	0.025	0.123	0.280	0.069	0.439
Caudate L	0.435	0.004	0.004	0.507	0.001	0.011	-0.088	0.577	0.942	-0.474	0.001	0.038	0.180	0.248	0.752
Caudate R	0.432	0.004	0.004	0.484	0.001	0.011	-0.072	0.645	0.942	-0.494	0.001	0.034	0.110	0.481	0.932
Cingulum Ant L	0.301	0.050	0.052	-0.023	0.884	0.949	0.116	0.457	0.942	-0.037	0.812	0.928	0.112	0.476	0.932
Cingulum Ant R	0.450	0.002	0.003	-0.002	0.988	0.988	0.157	0.316	0.942	-0.082	0.603	0.824	0.061	0.696	0.957
Cingulum Mid L	0.472	0.001	0.002	0.155	0.320	0.477	-0.006	0.969	0.969	-0.125	0.424	0.761	0.150	0.336	0.820
Cingulum Mid R	0.470	0.001	0.002	0.149	0.339	0.497	-0.022	0.889	0.942	-0.106	0.497	0.798	0.183	0.240	0.752
Cingulum Post L	0.445	0.003	0.003	0.111	0.478	0.613	0.178	0.254	0.942	-0.182	0.242	0.463	0.204	0.189	0.723
Cingulum Post R	0.248	0.109	0.109	0.071	0.651	0.796	0.036	0.820	0.942	-0.074	0.637	0.824	0.119	0.447	0.932
Cuneus L	0.455	0.002	0.003	0.296	0.054	0.119	-0.044	0.780	0.942	-0.250	0.106	0.267	0.220	0.157	0.690
Cuneus R	0.425	0.005	0.005	0.333	0.029	0.089	-0.035	0.825	0.942	-0.252	0.103	0.267	0.290	0.059	0.439
Frontal Inf Oper L	0.508	0.001	0.001	0.302	0.049	0.119	-0.200	0.198	0.942	-0.233	0.132	0.314	0.225	0.147	0.681
Frontal Inf Oper R	0.502	0.001	0.001	0.296	0.054	0.119	-0.026	0.869	0.942	-0.252	0.103	0.267	0.108	0.490	0.932
Frontal Inf Orb L	0.507	0.001	0.001	0.054	0.733	0.830	0.018	0.910	0.942	-0.107	0.494	0.798	-0.043	0.785	0.978
Frontal Inf Orb R	0.569	<0.001	<0.001	0.005	0.976	0.988	0.089	0.572	0.942	-0.093	0.554	0.813	-0.169	0.279	0.768
Frontal Inf Tri L	0.563	<0.001	<0.001	0.187	0.229	0.380	-0.046	0.768	0.942	-0.094	0.547	0.813	0.187	0.231	0.752
Frontal Inf Tri R	0.558	<0.001	<0.001	0.178	0.254	0.407	0.021	0.894	0.942	-0.136	0.386	0.707	0.166	0.289	0.770
Frontal Med Orb L	0.494	0.001	0.001	-0.018	0.911	0.966	0.032	0.838	0.942	-0.009	0.952	0.975	0.032	0.840	0.998
Frontal Med Orb R	0.602	<0.001	<0.001	-0.011	0.942	0.987	0.190	0.223	0.942	-0.097	0.536	0.813	0.018	0.908	0.998
Frontal Mid L	0.548	<0.001	0.001	0.117	0.454	0.606	-0.101	0.518	0.942	-0.050	0.751	0.905	0.092	0.559	0.932
Frontal Mid Orb L	0.545	<0.001	0.001	0.004	0.981	0.988	-0.022	0.888	0.942	-0.057	0.716	0.900	-0.176	0.258	0.752
Frontal Mid Orb R	0.532	<0.001	0.001	-0.056	0.719	0.830	0.032	0.837	0.942	-0.054	0.730	0.905	-0.282	0.067	0.439
Frontal Mid R	0.533	<0.001	0.001	0.130	0.406	0.566	-0.118	0.452	0.942	-0.078	0.619	0.824	0.103	0.512	0.932
Frontal Sup L	0.520	<0.001	0.001	0.106	0.498	0.626	-0.117	0.456	0.942	-0.082	0.603	0.824	0.076	0.626	0.932
Frontal Sup Medial L	0.489	0.001	0.001	0.034	0.827	0.900	-0.184	0.239	0.942	0.024	0.877	0.966	-0.014	0.931	0.998
Frontal Sup Medial R	0.552	<0.001	<0.001	0.034	0.829	0.900	-0.080	0.609	0.942	-0.012	0.941	0.975	-0.009	0.954	0.998
Frontal Sup Orb L	0.479	0.001	0.002	-0.063	0.689	0.830	-0.013	0.936	0.958	-0.045	0.776	0.923	0.039	0.806	0.981
Frontal Sup Orb R	0.521	<0.001	0.001	-0.120	0.442	0.599	0.120	0.444	0.942	-0.063	0.688	0.877	-0.091	0.561	0.932
Frontal Sup R	0.447	0.003	0.003	0.120	0.442	0.599	-0.091	0.560	0.942	-0.109	0.486	0.798	0.042	0.789	0.978
Fusiform L	0.435	0.004	0.004	0.340	0.026	0.081	-0.241	0.119	0.942	-0.019	0.902	0.975	0.053	0.734	0.978
Fusiform R	0.479	0.001	0.002	0.394	0.009	0.040	-0.250	0.106	0.942	-0.077	0.624	0.824	0.004	0.979	0.998
Heschl L	0.451	0.002	0.003	0.350	0.021	0.072	0.275	0.075	0.942	-0.379	0.012	0.083	0.077	0.622	0.932
Heschl R	0.562	<0.001	<0.001	0.297	0.053	0.119	0.146	0.350	0.942	-0.292	0.057	0.194	0.090	0.567	0.932
Hippocampus L	0.492	0.001	0.001	0.492	0.001	0.011	-0.134	0.393	0.942	-0.299	0.051	0.181	0.069	0.660	0.937
Hippocampus R	0.483	0.001	0.002	0.376	0.013	0.055	-0.090	0.566	0.942	-0.219	0.159	0.367	0.021	0.896	0.998
Insula L	0.492	0.001	0.001	0.260	0.092	0.176	0.110	0.482	0.942	-0.255	0.099	0.267	0.086	0.582	0.932
Insula R	0.563	<0.001	<0.001	0.211	0.175	0.310	0.076	0.629	0.942	-0.201	0.197	0.422	-0.093	0.554	0.932
Lingual L	0.348	0.022	0.024	0.290	0.059	0.127	0.022	0.890	0.942	-0.189	0.225	0.439	0.118	0.449	0.932
Lingual R	0.327	0.032	0.034	0.303	0.049	0.119	-0.018	0.909	0.942	-0.197	0.205	0.430	0.001	0.993	0.998
Occipital Mid L	0.595	<0.001	<0.001	0.368	0.015	0.058	0.052	0.742	0.942	-0.338	0.026	0.123	0.233	0.133	0.681
Occipital Mid R	0.620	<0.001	<0.001	0.399	0.008	0.039	-0.070	0.656	0.942	-0.398	0.008	0.069	0.299	0.052	0.439
Occipital Sup L	0.483	0.001	0.002	0.306	0.046	0.119	-0.135	0.390	0.942	-0.250	0.106	0.267	0.272	0.077	0.441
Occipital Sup R	0.660	<0.001	<0.001	0.420	0.005	0.030	-0.184	0.237	0.942	-0.352	0.021	0.114	0.279	0.070	0.439

Olfactory L	0.451	0.002	0.003	0.373	0.014	0.055	0.106	0.501	0.942	-0.277	0.072	0.226	0.000	0.998	0.998
Olfactory R	0.443	0.003	0.004	0.394	0.009	0.040	0.151	0.335	0.942	-0.328	0.032	0.134	-0.085	0.587	0.932
Pallidum L	0.256	0.098	0.099	0.300	0.051	0.119	0.071	0.653	0.942	-0.309	0.044	0.175	0.096	0.538	0.932
Pallidum R	0.306	0.046	0.048	0.330	0.030	0.089	-0.033	0.835	0.942	-0.288	0.061	0.200	0.019	0.903	0.998
Paracentral Lobule L	0.522	<0.001	0.001	0.210	0.176	0.310	-0.150	0.337	0.942	-0.106	0.499	0.798	0.023	0.882	0.998
Paracentral Lobule R	0.468	0.002	0.002	0.077	0.623	0.772	-0.167	0.286	0.942	0.038	0.808	0.928	-0.003	0.984	0.998
ParaHippocampal L	0.505	0.001	0.001	0.004	0.980	0.988	-0.165	0.290	0.942	0.081	0.607	0.824	0.037	0.814	0.981
ParaHippocampal R	0.538	<0.001	0.001	0.053	0.733	0.830	-0.112	0.474	0.942	0.028	0.860	0.966	-0.042	0.789	0.978
Parietal Inf L	0.487	0.001	0.001	0.362	0.017	0.063	-0.041	0.796	0.942	-0.335	0.028	0.123	0.270	0.080	0.441
Parietal Inf R	0.579	<0.001	<0.001	0.464	0.002	0.017	-0.124	0.429	0.942	-0.396	0.009	0.069	0.377	0.013	0.439
Parietal Sup L	0.470	0.001	0.002	0.221	0.155	0.285	-0.117	0.454	0.942	-0.149	0.340	0.637	0.176	0.258	0.752
Parietal Sup R	0.534	<0.001	0.001	0.286	0.063	0.132	-0.121	0.438	0.942	-0.192	0.218	0.439	0.215	0.166	0.694
Postcentral L	0.580	<0.001	<0.001	0.411	0.006	0.032	-0.169	0.278	0.942	-0.337	0.027	0.123	0.319	0.037	0.439
Postcentral R	0.562	<0.001	<0.001	0.433	0.004	0.025	-0.211	0.174	0.942	-0.368	0.015	0.095	0.356	0.019	0.439
Precentral L	0.525	<0.001	0.001	0.274	0.075	0.147	-0.107	0.493	0.942	-0.190	0.223	0.439	0.227	0.143	0.681
Precentral R	0.557	<0.001	<0.001	0.340	0.026	0.081	-0.166	0.289	0.942	-0.266	0.084	0.247	0.296	0.054	0.439
Precuneus L	0.537	<0.001	0.001	0.181	0.245	0.399	-0.127	0.418	0.942	-0.074	0.636	0.824	0.070	0.655	0.937
Precuneus R	0.414	0.006	0.006	0.194	0.212	0.359	-0.080	0.610	0.942	-0.095	0.545	0.813	0.076	0.630	0.932
Putamen L	0.436	0.003	0.004	0.308	0.045	0.119	0.097	0.537	0.942	-0.214	0.167	0.378	0.064	0.682	0.952
Putamen R	0.506	0.001	0.001	0.283	0.066	0.135	0.140	0.370	0.942	-0.266	0.084	0.247	-0.028	0.860	0.998
Rectus L	0.508	0.001	0.001	-0.171	0.273	0.429	0.124	0.427	0.942	-0.011	0.943	0.975	0.148	0.345	0.820
Rectus R	0.519	<0.001	0.001	-0.137	0.381	0.540	0.199	0.200	0.942	-0.082	0.601	0.824	0.091	0.564	0.932
Rolandic Oper L	0.494	0.001	0.001	0.359	0.018	0.063	0.193	0.214	0.942	-0.389	0.010	0.072	0.196	0.207	0.729
Rolandic Oper R	0.498	0.001	0.001	0.324	0.034	0.096	0.170	0.276	0.942	-0.304	0.047	0.175	0.151	0.335	0.820
Supp Motor Area L	0.552	<0.001	<0.001	0.161	0.302	0.459	-0.212	0.172	0.942	-0.051	0.746	0.905	0.018	0.911	0.998
Supp Motor Area R	0.546	<0.001	0.001	0.111	0.479	0.613	-0.180	0.249	0.942	-0.011	0.945	0.975	-0.012	0.940	0.998
SupraMarginal L	0.478	0.001	0.002	0.488	0.001	0.011	0.100	0.525	0.942	-0.442	0.003	0.043	0.289	0.061	0.439
SupraMarginal R	0.489	0.001	0.001	0.604	<0.001	0.002	-0.064	0.684	0.942	-0.528	<0.001	0.024	0.346	0.023	0.439
Temporal Inf L	0.495	0.001	0.001	0.203	0.193	0.332	-0.057	0.717	0.942	-0.002	0.992	0.992	-0.155	0.322	0.820
Temporal Inf R	0.614	<0.001	<0.001	0.162	0.298	0.459	-0.071	0.649	0.942	0.013	0.933	0.975	0.101	0.520	0.932
Temporal Mid L	0.536	<0.001	0.001	0.313	0.041	0.112	0.132	0.397	0.942	-0.206	0.185	0.408	0.206	0.185	0.723
Temporal Mid R	0.624	<0.001	<0.001	0.416	0.006	0.030	0.054	0.733	0.942	-0.304	0.048	0.175	0.174	0.265	0.752
Temporal Pole Mid L	0.565	<0.001	<0.001	-0.148	0.345	0.497	0.323	0.035	0.942	0.024	0.878	0.966	0.049	0.756	0.978
Temporal Pole Mid R	0.594	<0.001	<0.001	-0.111	0.481	0.613	0.173	0.268	0.942	0.114	0.468	0.798	-0.074	0.636	0.932
Temporal Pole Sup L	0.536	<0.001	0.001	-0.053	0.735	0.830	0.008	0.958	0.969	0.111	0.477	0.798	0.126	0.419	0.932
Temporal Pole Sup R	0.579	<0.001	<0.001	0.057	0.716	0.830	0.174	0.264	0.942	-0.038	0.807	0.928	-0.009	0.956	0.998
Temporal Sup L	0.506	0.001	0.001	0.282	0.067	0.135	0.081	0.605	0.942	-0.237	0.125	0.306	0.097	0.536	0.932
Temporal Sup R	0.584	<0.001	<0.001	0.440	0.003	0.025	0.034	0.829	0.942	-0.362	0.017	0.100	0.200	0.198	0.727
Thalamus L	0.451	0.002	0.003	0.549	<0.001	0.006	0.027	0.864	0.942	-0.462	0.002	0.038	0.075	0.632	0.932
Thalamus R	0.333	0.029	0.031	0.502	0.001	0.011	-0.052	0.743	0.942	-0.416	0.006	0.055	0.043	0.787	0.978

The table presents AAL90 brain regions showing significant group differences in IC2, derived from mCCA + jICA, between mTBI patients and healthy controls.

Table S2. AAL90 complete correlations, p-values, and FDR for IC15.

	IC15														
	CBF			Fp			Ff			Fs			Ds		
ROI	ϱ	p	FDR	ϱ	p	FDR	ϱ	p	FDR	ϱ	p	FDR	ϱ	p	FDR
Amygdala L	0.073	0.642	0.883	0.162	0.301	0.996	0.186	0.232	0.858	-0.248	0.109	0.990	0.199	0.201	0.457
Amygdala R	0.080	0.610	0.883	-0.012	0.941	0.996	0.296	0.054	0.853	-0.266	0.085	0.990	0.189	0.224	0.469
Angular L	0.096	0.540	0.883	0.079	0.614	0.996	0.187	0.229	0.858	-0.111	0.480	0.990	0.243	0.116	0.342
Angular R	0.092	0.558	0.883	0.017	0.913	0.996	0.055	0.726	0.948	-0.003	0.985	0.990	0.159	0.308	0.542
Calcarine L	0.208	0.181	0.883	-0.083	0.596	0.996	0.185	0.234	0.858	-0.048	0.760	0.990	0.371	0.014	0.215
Calcarine R	0.019	0.904	0.967	-0.119	0.447	0.996	0.164	0.294	0.858	-0.022	0.887	0.990	0.341	0.025	0.215
Caudate L	0.125	0.424	0.883	0.049	0.757	0.996	0.052	0.739	0.948	-0.075	0.635	0.990	0.396	0.009	0.215

Caudate R	0.029	0.852	0.967	0.140	0.372	0.996	-0.104	0.506	0.872	-0.102	0.516	0.990	0.346	0.023	0.215
Cingulum Ant L	0.094	0.548	0.883	0.006	0.971	0.996	0.126	0.421	0.858	-0.068	0.664	0.990	0.127	0.417	0.633
Cingulum Ant R	0.106	0.498	0.883	0.043	0.785	0.996	0.182	0.243	0.858	-0.137	0.380	0.990	0.077	0.623	0.772
Cingulum Mid L	0.146	0.349	0.883	0.099	0.526	0.996	0.219	0.158	0.858	-0.178	0.254	0.990	0.330	0.031	0.215
Cingulum Mid R	0.147	0.348	0.883	0.164	0.294	0.996	0.172	0.270	0.858	-0.207	0.183	0.990	0.253	0.101	0.331
Cingulum Post L	0.289	0.060	0.883	0.035	0.825	0.996	0.250	0.105	0.853	-0.161	0.302	0.990	0.299	0.052	0.228
Cingulum Post R	0.151	0.334	0.883	0.083	0.597	0.996	0.189	0.224	0.858	-0.183	0.240	0.990	0.334	0.029	0.215
Cuneus L	0.214	0.169	0.883	-0.035	0.826	0.996	0.189	0.224	0.858	-0.091	0.560	0.990	0.141	0.367	0.607
Cuneus R	0.019	0.902	0.967	-0.001	0.996	0.996	0.117	0.453	0.858	-0.058	0.710	0.990	0.173	0.268	0.523
Frontal Inf Oper L	0.163	0.296	0.883	0.054	0.731	0.996	0.318	0.038	0.853	-0.203	0.192	0.990	0.095	0.546	0.759
Frontal Inf Oper R	0.066	0.673	0.895	0.027	0.865	0.996	0.049	0.754	0.948	-0.070	0.658	0.990	0.131	0.404	0.623
Frontal Inf Orb L	0.126	0.421	0.883	-0.090	0.567	0.996	0.132	0.400	0.858	-0.021	0.896	0.990	0.050	0.751	0.843
Frontal Inf Orb R	0.109	0.488	0.883	-0.072	0.648	0.996	-0.032	0.839	0.972	-0.006	0.969	0.990	-0.030	0.849	0.883
Frontal Inf Tri L	0.109	0.486	0.883	0.088	0.576	0.996	0.244	0.115	0.853	-0.227	0.143	0.990	0.092	0.559	0.759
Frontal Inf Tri R	0.114	0.467	0.883	-0.039	0.803	0.996	0.054	0.732	0.948	-0.030	0.850	0.990	0.029	0.854	0.883
Frontal Med Orb L	0.093	0.552	0.883	-0.166	0.288	0.996	0.124	0.429	0.858	0.066	0.673	0.990	0.016	0.917	0.925
Frontal Med Orb R	0.099	0.529	0.883	-0.097	0.534	0.996	0.132	0.400	0.858	0.009	0.955	0.990	0.056	0.721	0.843
Frontal Mid L	0.100	0.525	0.883	0.123	0.433	0.996	-0.044	0.778	0.948	-0.118	0.452	0.990	0.027	0.863	0.883
Frontal Mid Orb L	0.106	0.497	0.883	-0.039	0.803	0.996	0.150	0.336	0.858	0.011	0.946	0.990	0.035	0.825	0.883
Frontal Mid Orb R	0.101	0.519	0.883	-0.074	0.638	0.996	0.104	0.505	0.872	0.002	0.990	0.990	-0.050	0.749	0.843
Frontal Mid R	0.055	0.726	0.920	0.050	0.748	0.996	0.009	0.953	0.990	-0.055	0.727	0.990	0.072	0.647	0.790
Frontal Sup L	0.176	0.259	0.883	0.103	0.511	0.996	-0.042	0.789	0.948	-0.093	0.553	0.990	-0.048	0.762	0.843
Frontal Sup Medial L	0.086	0.582	0.883	0.035	0.825	0.996	0.027	0.864	0.987	-0.046	0.769	0.990	0.028	0.860	0.883
Frontal Sup Medial R	0.086	0.585	0.883	0.117	0.454	0.996	-0.093	0.554	0.889	-0.079	0.614	0.990	-0.037	0.812	0.882
Frontal Sup Orb L	0.075	0.633	0.883	-0.087	0.580	0.996	0.184	0.237	0.858	-0.056	0.724	0.990	0.190	0.221	0.469
Frontal Sup Orb R	0.078	0.617	0.883	-0.063	0.688	0.996	-0.045	0.774	0.948	0.056	0.723	0.990	0.204	0.190	0.452
Frontal Sup R	0.105	0.504	0.883	0.069	0.660	0.996	-0.075	0.632	0.948	-0.045	0.777	0.990	0.047	0.767	0.843
Fusiform L	0.260	0.092	0.883	0.012	0.937	0.996	0.137	0.379	0.858	-0.110	0.484	0.990	0.159	0.308	0.542
Fusiform R	0.207	0.183	0.883	0.134	0.391	0.996	0.117	0.457	0.858	-0.171	0.274	0.990	0.254	0.101	0.331
Heschl L	0.021	0.896	0.967	-0.039	0.805	0.996	0.109	0.486	0.872	-0.016	0.920	0.990	0.155	0.321	0.554
Heschl R	0.047	0.767	0.935	-0.092	0.558	0.996	0.239	0.123	0.853	-0.031	0.846	0.990	0.060	0.702	0.835
Hippocampus L	0.265	0.086	0.883	-0.051	0.745	0.996	0.068	0.666	0.948	-0.004	0.981	0.990	0.184	0.238	0.486
Hippocampus R	0.183	0.239	0.883	0.037	0.815	0.996	-0.007	0.967	0.990	-0.023	0.885	0.990	0.245	0.113	0.342
Insula L	0.064	0.682	0.895	-0.027	0.863	0.996	0.285	0.064	0.853	-0.087	0.581	0.990	0.305	0.046	0.215
Insula R	0.029	0.854	0.967	-0.083	0.595	0.996	0.130	0.405	0.858	0.014	0.930	0.990	0.198	0.203	0.457
Lingual L	0.303	0.048	0.883	0.025	0.873	0.996	0.264	0.087	0.853	-0.177	0.257	0.990	0.257	0.096	0.331
Lingual R	0.268	0.082	0.883	0.012	0.937	0.996	0.314	0.040	0.853	-0.187	0.230	0.990	0.310	0.043	0.215
Occipital Mid L	0.123	0.430	0.883	0.006	0.971	0.996	0.143	0.359	0.858	-0.022	0.890	0.990	0.310	0.043	0.215
Occipital Mid R	0.148	0.343	0.883	-0.010	0.947	0.996	0.223	0.151	0.858	-0.037	0.816	0.990	0.065	0.678	0.817
Occipital Sup L	0.178	0.254	0.883	0.066	0.672	0.996	0.121	0.441	0.858	-0.124	0.427	0.990	0.135	0.389	0.612
Occipital Sup R	0.127	0.418	0.883	-0.064	0.683	0.996	0.160	0.307	0.858	-0.005	0.973	0.990	0.086	0.585	0.759
Olfactory L	0.079	0.613	0.883	0.117	0.453	0.996	0.130	0.405	0.858	-0.148	0.343	0.990	0.311	0.042	0.215
Olfactory R	0.003	0.986	0.997	0.174	0.264	0.996	0.045	0.774	0.948	-0.132	0.398	0.990	0.317	0.038	0.215
Pallidum L	0.213	0.171	0.883	-0.001	0.993	0.996	0.017	0.912	0.990	-0.020	0.900	0.990	0.360	0.018	0.215
Pallidum R	0.269	0.081	0.883	0.248	0.109	0.996	-0.320	0.036	0.853	0.126	0.420	0.990	0.322	0.035	0.215
Paracentral Lobule L	0.201	0.196	0.883	0.185	0.234	0.996	0.005	0.977	0.990	-0.184	0.238	0.990	0.277	0.072	0.277
Paracentral Lobule R	0.062	0.692	0.896	0.306	0.046	0.996	-0.130	0.407	0.858	-0.183	0.241	0.990	0.217	0.163	0.422
ParaHippocampal L	0.243	0.116	0.883	0.183	0.241	0.996	0.149	0.342	0.858	-0.195	0.210	0.990	0.138	0.378	0.607
ParaHippocampal R	0.187	0.230	0.883	0.196	0.209	0.996	0.251	0.105	0.853	-0.268	0.082	0.990	0.085	0.587	0.759
Parietal Inf L	0.052	0.739	0.920	0.236	0.128	0.996	-0.002	0.990	0.990	-0.170	0.276	0.990	0.236	0.128	0.363
Parietal Inf R	0.077	0.623	0.883	0.112	0.475	0.996	0.075	0.633	0.948	-0.090	0.565	0.990	0.084	0.592	0.759
Parietal Sup L	0.006	0.967	0.990	0.182	0.242	0.996	-0.092	0.555	0.889	-0.113	0.471	0.990	0.122	0.436	0.651
Parietal Sup R	-0.021	0.896	0.967	0.091	0.561	0.996	0.009	0.952	0.990	-0.084	0.593	0.990	0.052	0.743	0.843
Postcentral L	0.067	0.671	0.895	0.179	0.252	0.996	-0.020	0.901	0.990	-0.138	0.377	0.990	0.168	0.282	0.531
Postcentral R	0.085	0.589	0.883	0.069	0.662	0.996	-0.054	0.730	0.948	-0.038	0.811	0.990	0.114	0.465	0.682

Precentral L	0.126	0.423	0.883	0.151	0.334	0.996	-0.040	0.799	0.948	-0.137	0.382	0.990	0.167	0.283	0.531
Precentral R	0.136	0.383	0.883	0.056	0.722	0.996	-0.009	0.954	0.990	-0.045	0.773	0.990	0.086	0.583	0.759
Precuneus L	0.161	0.301	0.883	0.163	0.295	0.996	0.010	0.947	0.990	-0.164	0.294	0.990	0.293	0.057	0.237
Precuneus R	0.038	0.810	0.964	0.151	0.334	0.996	0.022	0.887	0.990	-0.138	0.379	0.990	0.176	0.258	0.516
Putamen L	0.151	0.333	0.883	-0.122	0.436	0.996	0.058	0.712	0.948	-0.013	0.932	0.990	0.378	0.012	0.215
Putamen R	0.106	0.497	0.883	0.013	0.935	0.996	-0.114	0.468	0.858	0.108	0.491	0.990	0.351	0.021	0.215
Rectus L	0.084	0.593	0.883	0.024	0.878	0.996	0.126	0.422	0.858	-0.114	0.467	0.990	0.373	0.014	0.215
Rectus R	0.076	0.627	0.883	0.108	0.492	0.996	0.093	0.554	0.889	-0.156	0.319	0.990	0.384	0.011	0.215
Rolandic Oper L	0.013	0.934	0.967	0.017	0.912	0.996	0.294	0.056	0.853	-0.168	0.282	0.990	0.192	0.217	0.469
Rolandic Oper R	-0.027	0.863	0.967	-0.018	0.909	0.996	0.237	0.126	0.853	-0.126	0.419	0.990	0.207	0.183	0.446
Supp Motor Area L	0.110	0.483	0.883	0.223	0.150	0.996	-0.038	0.808	0.948	-0.197	0.205	0.990	0.336	0.028	0.215
Supp Motor Area R	0.114	0.466	0.883	0.317	0.039	0.996	-0.166	0.289	0.858	-0.213	0.170	0.990	0.247	0.110	0.342
SupraMarginal L	0.121	0.441	0.883	-0.033	0.834	0.996	0.246	0.112	0.853	-0.064	0.683	0.990	0.091	0.563	0.759
SupraMarginal R	0.111	0.480	0.883	-0.045	0.776	0.996	0.004	0.979	0.990	0.059	0.705	0.990	0.161	0.303	0.542
Temporal Inf L	0.199	0.202	0.883	-0.004	0.980	0.996	0.135	0.389	0.858	-0.141	0.367	0.990	0.269	0.082	0.300
Temporal Inf R	0.163	0.296	0.883	-0.039	0.803	0.996	0.170	0.277	0.858	-0.143	0.361	0.990	0.212	0.173	0.435
Temporal Mid L	0.079	0.615	0.883	-0.029	0.853	0.996	0.193	0.214	0.858	-0.061	0.700	0.990	0.232	0.134	0.369
Temporal Mid R	0.112	0.475	0.883	-0.017	0.913	0.996	0.051	0.744	0.948	0.008	0.958	0.990	0.140	0.371	0.607
Temporal Pole Mid L	0.016	0.919	0.967	0.352	0.021	0.996	0.065	0.677	0.948	-0.394	0.009	0.784	-0.015	0.925	0.925
Temporal Pole Mid R	0.052	0.742	0.920	0.163	0.296	0.996	0.092	0.556	0.889	-0.253	0.102	0.990	-0.081	0.608	0.764
Temporal Pole Sup L	0.000	0.999	0.999	0.150	0.337	0.996	0.177	0.256	0.858	-0.235	0.130	0.990	0.083	0.595	0.759
Temporal Pole Sup R	-0.014	0.927	0.967	0.129	0.409	0.996	0.115	0.462	0.858	-0.230	0.137	0.990	-0.090	0.564	0.759
Temporal Sup L	0.035	0.826	0.967	-0.010	0.947	0.996	0.217	0.162	0.858	-0.091	0.561	0.990	0.226	0.144	0.384
Temporal Sup R	0.045	0.775	0.935	-0.021	0.892	0.996	-0.073	0.643	0.948	0.030	0.849	0.990	0.137	0.379	0.607
Thalamus L	0.474	0.001	0.115	-0.035	0.822	0.996	0.062	0.692	0.948	-0.010	0.951	0.990	0.306	0.046	0.215
Thalamus R	0.288	0.061	0.883	0.043	0.785	0.996	0.089	0.572	0.899	-0.095	0.543	0.990	0.283	0.066	0.264

The table presents AAL90 brain regions showing significant group differences in IC15, derived from mCCA + jICA, between mTBI patients and healthy controls.

Table S3. Complete correlations between GOS-E and IVIM/ASL metrics inside the ROIs of the AAL90 atlas. Table includes ϱ, p-values, and FDR values.

	CBF			**Fp**			**Ff**			**Fs**			**Ds**		
ROI	ϱ	**p**	**FDR**	ϱ	**p**	**FDR**	ϱ	**p**	**FDR**	ϱ	**p**	**FDR**	ϱ	**p**	**FDR**
Amygdala L	0.087	0.723	0.969	0.224	0.356	0.857	-0.194	0.425	0.923	-0.008	0.975	0.975	0.499	0.030	0.169
Amygdala R	0.136	0.577	0.969	-0.034	0.889	0.961	-0.133	0.587	0.939	0.146	0.552	0.866	0.436	0.062	0.227
Angular L	0.102	0.678	0.969	0.249	0.304	0.857	0.174	0.475	0.923	-0.285	0.236	0.629	0.267	0.270	0.416
Angular R	0.154	0.530	0.969	0.130	0.595	0.961	0.297	0.217	0.923	-0.300	0.211	0.629	0.362	0.128	0.278
Calcarine L	-0.275	0.255	0.969	0.218	0.369	0.857	0.321	0.181	0.923	-0.360	0.130	0.629	0.382	0.107	0.272
Calcarine R	-0.050	0.838	0.969	0.390	0.099	0.702	0.501	0.029	0.850	-0.539	0.017	0.305	0.249	0.304	0.445
Caudate L	0.136	0.578	0.969	-0.030	0.903	0.961	-0.075	0.760	0.972	0.084	0.734	0.897	0.301	0.210	0.342
Caudate R	0.160	0.512	0.969	0.346	0.147	0.702	-0.358	0.133	0.923	-0.133	0.589	0.866	0.364	0.125	0.278
Cingulum Ant L	0.037	0.880	0.969	-0.022	0.928	0.961	0.088	0.719	0.972	-0.028	0.909	0.962	0.340	0.154	0.294
Cingulum Ant R	0.012	0.961	0.972	0.115	0.640	0.961	0.058	0.814	0.972	-0.129	0.600	0.866	0.409	0.082	0.249
Cingulum Mid L	-0.024	0.924	0.969	0.025	0.920	0.961	0.166	0.498	0.923	-0.087	0.722	0.897	0.491	0.033	0.170
Cingulum Mid R	0.105	0.669	0.969	0.138	0.573	0.961	0.127	0.604	0.949	-0.158	0.519	0.866	0.587	0.008	0.109
Cingulum Post L	-0.214	0.380	0.969	0.224	0.357	0.857	0.201	0.409	0.923	-0.295	0.221	0.629	0.297	0.216	0.346
Cingulum Post R	-0.004	0.988	0.988	0.276	0.253	0.798	0.152	0.535	0.923	-0.304	0.206	0.629	0.196	0.421	0.553
Cuneus L	-0.256	0.289	0.969	0.275	0.254	0.798	0.183	0.453	0.923	-0.285	0.236	0.629	0.320	0.182	0.313
Cuneus R	-0.038	0.879	0.969	0.435	0.063	0.702	0.441	0.058	0.850	-0.498	0.030	0.412	0.381	0.108	0.272
Frontal Inf Oper L	0.136	0.579	0.969	0.328	0.171	0.702	-0.019	0.939	0.972	-0.227	0.351	0.772	0.662	0.002	0.109
Frontal Inf Oper R	0.162	0.508	0.969	0.093	0.704	0.961	0.415	0.078	0.850	-0.221	0.362	0.778	0.371	0.118	0.274
Frontal Inf Orb L	0.127	0.603	0.969	0.048	0.844	0.961	0.261	0.280	0.923	-0.159	0.516	0.866	0.358	0.133	0.278
Frontal Inf Orb R	0.168	0.491	0.969	0.150	0.539	0.952	0.154	0.528	0.923	-0.307	0.202	0.629	-0.061	0.804	0.869
Frontal Inf Tri L	0.043	0.862	0.969	0.214	0.380	0.857	0.162	0.507	0.923	-0.164	0.501	0.866	0.477	0.039	0.175

Frontal Inf Tri R	0.074	0.762	0.969	-0.060	0.807	0.961	0.558	0.013	0.850	-0.078	0.751	0.905	0.208	0.392	0.536
Frontal Med Orb L	0.176	0.471	0.969	-0.149	0.543	0.952	-0.024	0.923	0.972	0.118	0.631	0.895	0.233	0.336	0.485
Frontal Med Orb R	-0.018	0.943	0.969	-0.044	0.859	0.961	0.019	0.937	0.972	0.019	0.938	0.971	0.261	0.281	0.426
Frontal Mid L	0.116	0.636	0.969	0.197	0.420	0.880	-0.206	0.397	0.923	-0.104	0.671	0.897	0.386	0.102	0.272
Frontal Mid Orb L	0.058	0.814	0.969	0.099	0.686	0.961	0.049	0.841	0.972	-0.031	0.900	0.962	0.212	0.384	0.536
Frontal Mid Orb R	0.087	0.723	0.969	-0.095	0.699	0.961	0.220	0.365	0.923	-0.036	0.885	0.962	0.092	0.707	0.778
Frontal Mid R	0.118	0.629	0.969	-0.093	0.704	0.961	0.281	0.244	0.923	0.025	0.919	0.962	0.146	0.550	0.682
Frontal Sup L	0.141	0.564	0.969	0.071	0.773	0.961	-0.096	0.697	0.972	-0.034	0.891	0.962	0.325	0.175	0.313
Frontal Sup Medial L	0.205	0.399	0.969	-0.058	0.812	0.961	-0.095	0.699	0.972	0.087	0.725	0.897	0.206	0.399	0.536
Frontal Sup Medial R	0.147	0.549	0.969	-0.108	0.661	0.961	-0.079	0.747	0.972	0.128	0.601	0.866	0.279	0.248	0.389
Frontal Sup Orb L	0.076	0.757	0.969	0.045	0.855	0.961	0.037	0.880	0.972	-0.049	0.844	0.962	0.121	0.621	0.716
Frontal Sup Orb R	0.076	0.756	0.969	0.089	0.718	0.961	0.007	0.977	0.988	-0.096	0.697	0.897	0.092	0.708	0.778
Frontal Sup R	0.076	0.757	0.969	-0.100	0.683	0.961	0.229	0.346	0.923	0.033	0.894	0.962	0.027	0.912	0.925
Fusiform L	-0.199	0.413	0.969	0.119	0.628	0.961	0.032	0.895	0.972	-0.104	0.672	0.897	0.371	0.118	0.274
Fusiform R	0.097	0.692	0.969	0.051	0.836	0.961	0.136	0.577	0.939	-0.145	0.554	0.866	0.441	0.059	0.225
Heschl L	0.038	0.877	0.969	0.325	0.175	0.702	0.144	0.557	0.932	-0.333	0.164	0.629	0.168	0.491	0.618
Heschl R	0.032	0.896	0.969	0.621	0.005	0.404	0.307	0.201	0.923	-0.641	0.003	0.095	-0.017	0.944	0.944
Hippocampus L	-0.084	0.731	0.969	0.221	0.364	0.857	-0.036	0.883	0.972	-0.101	0.681	0.897	0.596	0.007	0.109
Hippocampus R	0.180	0.460	0.969	-0.018	0.941	0.963	0.060	0.807	0.972	-0.033	0.892	0.962	0.552	0.014	0.109
Insula L	0.175	0.475	0.969	0.254	0.293	0.857	0.107	0.663	0.972	-0.262	0.278	0.692	0.569	0.011	0.109
Insula R	0.148	0.547	0.969	0.451	0.052	0.702	0.167	0.496	0.923	-0.457	0.049	0.412	0.204	0.402	0.536
Lingual L	-0.274	0.257	0.969	0.013	0.958	0.969	0.194	0.426	0.923	-0.143	0.560	0.866	0.467	0.044	0.175
Lingual R	-0.020	0.936	0.969	0.095	0.700	0.961	0.421	0.073	0.850	-0.291	0.226	0.629	0.428	0.067	0.237
Occipital Mid L	0.039	0.875	0.969	0.343	0.151	0.702	0.313	0.191	0.923	-0.443	0.058	0.412	0.130	0.597	0.709
Occipital Mid R	-0.016	0.947	0.969	0.180	0.462	0.924	0.181	0.460	0.923	-0.325	0.174	0.629	0.182	0.455	0.588
Occipital Sup L	-0.018	0.941	0.969	0.375	0.114	0.702	0.160	0.514	0.923	-0.343	0.151	0.629	0.344	0.149	0.292
Occipital Sup R	0.172	0.482	0.969	0.347	0.146	0.702	0.242	0.319	0.923	-0.368	0.121	0.629	0.467	0.044	0.175
Olfactory L	-0.066	0.790	0.969	0.351	0.140	0.702	0.058	0.815	0.972	-0.216	0.374	0.785	0.135	0.581	0.709
Olfactory R	-0.089	0.717	0.969	0.433	0.064	0.702	0.049	0.842	0.972	-0.255	0.292	0.695	0.056	0.820	0.869
Pallidum L	0.083	0.735	0.969	0.075	0.761	0.961	0.091	0.712	0.972	-0.159	0.516	0.866	0.588	0.008	0.109
Pallidum R	0.130	0.597	0.969	-0.208	0.392	0.862	0.043	0.860	0.972	0.166	0.498	0.866	0.573	0.010	0.109
Paracentral Lobule L	0.160	0.513	0.969	-0.004	0.986	0.986	0.250	0.301	0.923	-0.158	0.517	0.866	0.172	0.482	0.615
Paracentral Lobule R	0.315	0.189	0.969	0.320	0.182	0.702	0.163	0.506	0.923	-0.324	0.175	0.629	0.470	0.043	0.175
ParaHippocampal L	0.048	0.845	0.969	-0.043	0.863	0.961	0.072	0.770	0.972	-0.033	0.894	0.962	0.535	0.018	0.124
ParaHippocampal R	0.186	0.447	0.969	0.069	0.780	0.961	0.241	0.321	0.923	-0.178	0.465	0.866	0.322	0.179	0.313
Parietal Inf L	0.155	0.527	0.969	0.301	0.210	0.734	0.034	0.890	0.972	-0.260	0.283	0.692	0.384	0.105	0.272
Parietal Inf R	0.130	0.596	0.969	0.164	0.502	0.941	0.242	0.317	0.923	-0.281	0.243	0.629	0.575	0.010	0.109
Parietal Sup L	0.106	0.666	0.969	0.368	0.121	0.702	0.037	0.881	0.972	-0.304	0.205	0.629	0.350	0.142	0.284
Parietal Sup R	0.141	0.565	0.969	0.146	0.552	0.952	0.186	0.445	0.923	-0.200	0.411	0.822	0.470	0.042	0.175
Postcentral L	0.064	0.795	0.969	0.215	0.376	0.857	-0.041	0.868	0.972	-0.175	0.475	0.866	0.254	0.294	0.439
Postcentral R	0.079	0.749	0.969	0.159	0.514	0.943	0.173	0.478	0.923	-0.243	0.316	0.731	0.381	0.108	0.272
Precentral L	0.021	0.933	0.969	0.164	0.503	0.941	-0.157	0.521	0.923	-0.091	0.711	0.897	0.320	0.181	0.313
Precentral R	0.036	0.884	0.969	0.029	0.907	0.961	0.178	0.467	0.923	-0.093	0.704	0.897	0.415	0.077	0.249
Precuneus L	-0.113	0.646	0.969	0.415	0.077	0.702	0.171	0.483	0.923	-0.361	0.129	0.629	0.383	0.105	0.272
Precuneus R	0.037	0.881	0.969	0.396	0.094	0.702	0.296	0.219	0.923	-0.405	0.085	0.537	0.376	0.113	0.274
Putamen L	0.085	0.729	0.969	0.179	0.464	0.924	-0.382	0.106	0.850	0.333	0.163	0.629	0.496	0.031	0.169
Putamen R	0.129	0.598	0.969	-0.050	0.839	0.961	-0.389	0.100	0.850	0.438	0.061	0.412	0.549	0.015	0.109
Rectus L	0.046	0.852	0.969	-0.072	0.771	0.961	0.052	0.832	0.972	-0.012	0.962	0.975	-0.050	0.839	0.869
Rectus R	-0.049	0.841	0.969	0.060	0.807	0.961	-0.014	0.956	0.978	-0.026	0.917	0.962	0.027	0.914	0.925
Rolandic Oper L	0.117	0.633	0.969	0.333	0.163	0.702	0.055	0.823	0.972	-0.300	0.212	0.629	0.562	0.012	0.109
Rolandic Oper R	0.117	0.634	0.969	0.535	0.018	0.702	0.471	0.042	0.850	-0.603	0.006	0.138	0.416	0.076	0.249
Supp Motor Area L	0.067	0.787	0.969	-0.038	0.878	0.961	0.001	0.996	0.996	0.032	0.895	0.962	0.123	0.617	0.716
Supp Motor Area R	0.212	0.383	0.969	0.052	0.833	0.961	-0.105	0.670	0.972	0.010	0.967	0.975	0.228	0.348	0.494
SupraMarginal L	0.098	0.689	0.969	0.336	0.160	0.702	0.066	0.788	0.972	-0.343	0.151	0.629	0.306	0.203	0.337
SupraMarginal R	0.171	0.483	0.969	0.215	0.377	0.857	0.353	0.138	0.923	-0.453	0.052	0.412	0.511	0.025	0.159

Temporal Inf L	0.122	0.619	0.969	0.264	0.275	0.835	0.023	0.926	0.972	-0.211	0.386	0.791	0.306	0.202	0.337
Temporal Inf R	0.112	0.649	0.969	0.175	0.473	0.924	0.142	0.561	0.932	-0.235	0.332	0.749	-0.058	0.812	0.869
Temporal Mid L	0.120	0.625	0.969	0.406	0.084	0.702	0.247	0.309	0.923	-0.440	0.059	0.412	0.355	0.136	0.278
Temporal Mid R	0.158	0.517	0.969	0.495	0.031	0.702	0.458	0.049	0.850	-0.653	0.002	0.095	0.119	0.626	0.716
Temporal Pole Mid L	0.195	0.423	0.969	0.026	0.916	0.961	0.169	0.488	0.923	-0.145	0.554	0.866	0.358	0.133	0.278
Temporal Pole Mid R	0.323	0.178	0.969	0.310	0.196	0.719	0.250	0.301	0.923	-0.477	0.039	0.412	0.112	0.649	0.732
Temporal Pole Sup L	0.189	0.439	0.969	0.071	0.772	0.961	0.066	0.787	0.972	-0.132	0.590	0.866	0.409	0.082	0.249
Temporal Pole Sup R	0.226	0.352	0.969	0.297	0.217	0.734	0.189	0.438	0.923	-0.462	0.047	0.412	0.051	0.834	0.869
Temporal Sup L	0.164	0.501	0.969	0.319	0.184	0.702	0.176	0.471	0.923	-0.354	0.137	0.629	0.327	0.172	0.313
Temporal Sup R	0.173	0.478	0.969	0.488	0.034	0.702	0.330	0.168	0.923	-0.639	0.003	0.095	0.133	0.588	0.709
Thalamus L	-0.120	0.624	0.969	0.203	0.405	0.869	-0.399	0.091	0.850	0.130	0.597	0.866	0.587	0.008	0.109
Thalamus R	-0.017	0.945	0.969	0.241	0.321	0.857	-0.439	0.060	0.850	0.114	0.643	0.897	0.551	0.015	0.109

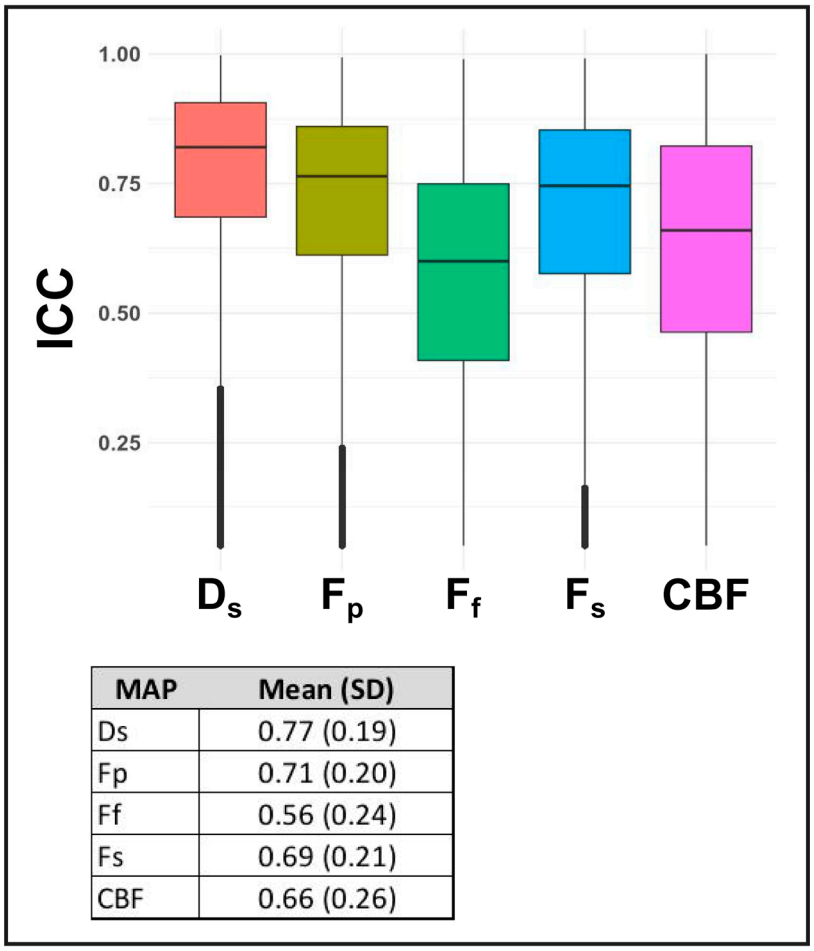


Figure S1. Test–retest reliability of IVIM-derived parameters and ASL-derived CBF in 11 healthy controls. Boxplots show the distribution of voxel-wise intraclass correlation coefficients (ICC) for each parameter, and the table summarizes mean ICC values (± Standard Deviation; SD).