

Table S1: Summary of data utilized in experiments. This table details the various datasets used throughout our study, specifying the image modalities and the health status of the data (H/D for Healthy/Diseased, respectively), including disease types and number of samples. It also delineates the usage of each dataset segment, indicating whether it was employed for pretraining (P) or for fine-tuning downstream tasks (F). Notably, for the BRATS dataset, only T1 modality images were used for pretraining, whereas all available modalities were utilized for fine-tuning purposes.

Dataset	Modality	H/D	Disease	Sample #	P/F
1000 Connectomes Project [4]	T1 MRI	H	-	867	P
Consortium for Reliability and Reproducibility (CoRR) [28]	T1 MRI	H	-	639	P
Information eXtraction from Images (IXI) database [23]	T1 MRI	H	-	560	P
Nathan Kline Institute Rockland Sample (NKI) [22]	T1 MRI	H	-	342	P
Open Access Series of Imaging Studies 3 (OASIS-3) [19]	T1 MRI	H	-	603	P
Alzheimer's Disease Neuroimaging Initiative (ADNI) [16]	T1 MRI	H	-	1666	P
	T1 MRI	D	Alzheimer's	498	P
Brain Tumor Segmentation Challenge 2021 (BraTS2021) [3]	T1 T1Gd T2 Flair MRI	D	Brain Tumor	498	P + F
OpenNeuro - Focal Epilepsy [24]	T1 MRI	H	-	85	F
	T1 MRI	D	Focal Epilepsy	85	F
OpenNeuro - ADHD [24]	T1 MRI	H	-	85	F
	T1 MRI	D	Focal Epilepsy	85	F
OpenNeuro - Schizophrenia [25]	T1 MRI	H	-	25	F
	T1 MRI	D	Schizophrenia	46	F
	CT	D	Hemorrhage	205	F
CQ500 [7]	CT	D	Fracture	39	F
	CT	D	Midline Shift	65	F
	CT	D	Others	182	F
	CT	H	-	2025	P
In house	CT	D	Hemorrhage	115	F
	CT	D	Fracture	234	F
	CT	D	Midline Shift	90	F
	CT	D	Others	4254	P