Multimodal neuroimaging data of various brain disorders provides valuable information to understand brain function in health and disease. Various neuroimaging-based databases have been developed that mainly consist of volumetric magnetic resonance imaging (MRI) data. We present the comprehensive web-based neuroimaging platform “SWADESH” for hosting multi-disease, multimodal neuroimaging, and neuropsychological data along with analytical pipelines. This novel initiative includes neurochemical and magnetic susceptibility data for healthy and diseased conditions, acquired using MR spectroscopy (MRS) and quantitative susceptibility mapping (QSM) respectively. The SWADESH architecture also provides a neuroimaging database which includes MRI, MRS, functional MRI (fMRI), diffusion weighted imaging (DWI), QSM, neuropsychological data and associated data analysis pipelines. Our final objective is to provide a master database of major brain disease states (neurodegenerative, neuropsychiatric, neurodevelopmental, and others) and to identify characteristic features and biomarkers associated with such disorders [1)]

1)
Mandal PK, Jindal K, Roy S, Arora Y, Sharma S, Joon S, Goel A, Ahasan Z, Maroon JC, Singh K, Sandal K, Tripathi M, Sharma P, Samkaria A, Gaur S, Shandilya S. SWADESH: a multimodal multi-disease brain imaging and neuropsychological database and data analytics platform. Front Neurol. 2023 Oct 4;14:1258116. doi: 10.3389/fneur.2023.1258116. PMID: 37859652; PMCID: PMC10582723.