

A4 / LEARN MRI Read Methods

NOTE: The Feb-2025 data release replaced the previously shared A4 MRI Safety Reads data set with an updated, validated data set. This current version only contains the baseline read results for A4 and LEARN participants; an updated version with longitudinal read results will be shared in the future.

Methods

MRI scans were collected at to assist in determining subject eligibility at baseline and to monitor for subject safety in longitudinal follow-up visits. The central reads were performed by the Mayo Clinic Aging and Dementia Imaging Research Laboratory.

The central reads reports were later processed by the Massachusetts General Hospital (Harvard Medical School) team that implemented Standardized F-codes (F101-F219) to identify microhemorrhages and superficial siderosis findings from the radiology reports. The findings were categorized into definite and possible cases, as well as into lobar regions (Frontal, Parietal, Temporal, and Occipital lobes) and deep (subcortical) regions (Thalamus, Basal Ganglia, Internal Capsule, Corpus Callosum, Cerebellum, Brainstem including pons). The results were cross-validated by comparing the findings with original central read reports, where Mayo comments were extracted automatically to resolve discrepancies. Other quality control steps included multiple rounds of testing on sample datasets, manual verification of results by trained readers, and documentation of any discrepancies found during validation.