

AMYPAD-PNHS: A Pan-European, Multi-Site & Multimodal MRI Dataset of Older Adults Without Dementia

Leonard Pieperhoff, Mario Tranfa, Prithvi Arunachalam, Carole H. Sudre, Mathijs B. J. Dijsselhof, Beatriz Esteves Padrela, Federico Masserini, Stefano Caneva, Giuseppe Pontillo, David M. Cash, Emma S. Lockett, Craig Ritchie, Mercè Boada, Marta Marquié, Wiesje M. van der Flier, Rik Vandenberghe, Lisa Quenon, Bernard J. Hanseeuw, Pablo Martinez-Lage, Pierre Payoux, Anouk den Braber, Pieter Jelle Visser, Michael Schöll, Giovanni B. Frisoni, ...Frederik Barkhof

Abstract:

The Amyloid Imaging to Prevent Alzheimer's Disease Prognostic and Natural History Study (AMYPAD-PNHS) multimodal magnetic resonance imaging (MRI) dataset provides open-access longitudinal MRI data of 2759 cognitively normal or mild cognitive impairment individuals, encompassing (micro-)structural, physiological, and functional MRI sequences from 10 European parent cohorts. Processed and raw images, and image-derived (endo-)phenotypes, are organized in Brain Imaging Data Structure (BIDS) standards and accessible upon request, to enhance generalizability and comparability between future neuroimaging studies. This dataset supports preclinical Alzheimer's disease (AD) and aging-related research by enabling robust multimodal analyses of neurodegeneration, microvascular pathology, and structural and functional connectivity changes, facilitating advanced investigations into preclinical AD mechanisms, informing early intervention strategies and allowing reproducible and centralized neuroimaging (endo-)phenotyping.

Scientific Data (2026)

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