Comparing Brain Amyloid Deposition, Glucose Metabolism, and Atrophy in Mild Cognitive Impairment with and without a Family History of Dementia

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Supplementary Figure 1. Brain regions showing significant group differences in brain fibrillar amyloid load on partial volume corrected Pittsburgh compound B (PiB) positron emission tomography (PET). First row: Increased PiB retention in the entire mild cognitive impairment (MCI) group (n=42) compared to cognitively normal (NL) controls (n=12); Second row: Increased PiB retention in MCI with negative family history of any dementia (NH, n=24) compared to controls; Third row: Increased PiB retention in MCI with a paternal history of dementia (PH, n=8) compared to controls; Fourth row: Increased PiB retention in MCI with a maternal history of dementia (MH, n=10) compared to controls; Bottom row: Increased PiB retention in MCI MH compared to NH (red) and in MCI PH compared to NH (yellow). Areas of overlap are in orange. Statistical parametric maps indicating regions of increased PiB retention, reflecting higher amyloid load, are represented on color coded scales and superimposed onto a spatially normalized MRI template image.
Supplementary Figure 2. Brain regions showing significant group differences in brain glucose metabolism on partial volume corrected $^{18}$F-fluorodeoxyglucose (FDG)-PET. First row: Reduced FDG metabolism in the entire MCI group ($n=42$) compared to NL controls ($n=12$). Second row: Reduced FDG metabolism in MCI with a negative family history of any dementia (NH, $n=24$) compared to controls. Third row: Reduced FDG metabolism in MCI with a paternal history of dementia (PH, $n=8$) compared to controls. Fourth row: Reduced FDG metabolism in MCI with a maternal history of dementia (MH, $n=10$) compared to controls. Bottom row: Reduced FDG metabolism in MCI MH compared to NH (violet) and to PH (blue). Areas of overlap are in purple. Statistical parametric maps indicating regions of reduced FDG uptake, reflecting hypometabolism, are represented on color coded scales and superimposed onto a spatially normalized MRI template image.