Press Release Title: Study Examines Risk of Early Death for People with Mild Cognitive Impairment

Abstract Title: #P4.343 Mortality is greater in persons with non-amnestic than with amnestic mild cognitive impairment. The Mayo Clinic Study of Aging

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Objective: Assess the hazard of death in persons with amnestic and non-amnestic mild cognitive impairment (aMCI, naMCI) in the Mayo Clinic Study of Aging (MCSA).

Background: The relatively little information on mortality in MCI patients in population-based studies suggests higher mortality in MCI compared to cognitively normal individuals. However, mortality by MCI subtypes has not been investigated.

Design/Methods: MCSA is an age/sex stratified random sample of Olmsted County residents, 70–89 years old on October 1, 2004, evaluated by a study nurse, a neurologic evaluation by a physician, and neuropsychological testing to assess cognitive function. Participants were followed at 15-month intervals. Deaths were determined from the Mayo Clinic databases at the time of follow-up. Mortality for MCI vs. cognitively normal subjects was estimated using proportional hazards models.

Results: Over a median follow-up of 5.8 years, 331 of 862 MCI cases and 224 of 1292 cognitively normal subjects died. Compared to cognitively normal individuals, mortality was elevated in persons with MCI (hazard ratio [HR] = 1.81; 95% CI: 1.45 to 2.25), and with both aMCI (HR = 1.68; 95% CI: 1.33 to 2.12) and naMCI (HR = 2.26; 95% CI: 1.66 to 3.09) after adjusting for potential confounders. Mortality was similar in persons with MCI who later developed dementia (HR =1.47; 95% CI: 1.07 to 2.03) and those who never developed dementia (HR =1.48; 95% CI: 1.14 to 1.92). Mortality was increased for single domain (HR =1.76; 95% CI: 1.37 to 2.28) and multiple domain aMCI (HR =1.49; 95% CI: 1.05 to 2.10), and for single domain (HR =2.31; 95% CI: 1.65 to 3.24) and multiple domain naMCI (HR =2.04; 95% CI: 1.14 to 3.66).

Conclusions: Findings demonstrate that both aMCI and naMCI are associated with increased mortality, and this association is stronger in persons with naMCI.

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