a CR of 38.1/1000 person-years and the other 50%, CDR = 0.5 (70% with sum of boxes scores ≤1, CR = 145.4/1000 person-years and 30% > 1, CR = 216.8/1000 person-years). CR was 91.3/1000 person-years on average. In the multivariate analysis, when compared with those with CDR = 0, the hazard ratio of those with CDR = 0.5 was 3.82; and for those with CDR = 0.5 and sum of boxes scores >1, 5.69. **Conclusions:** Conversion rate to dementia was significantly higher among those with CDR = 0.5 and even higher for those whose sum of boxes scores was >1. Therefore, CDR was able to predict which individuals had a higher likelihood of converting to dementia.

P4-564 SHORT-TERM OUTCOMES OF A RANDOMIZED CONTROLLED TRIAL OF AMYLOID PET RESULTS DISCLOSURE IN MILD COGNITIVE IMPAIRMENT

Jennifer Lingler[1], Susan M. Sereika[1], Ann Cohen[2], Melissa Knox[1], Lisa Tamres[1], J Scott Roberts[3], William E. Klunk[1], [1]*University of Pittsburgh, Pittsburgh, PA, USA;* [2]*Alzheimer's Disease Research Center, Pittsburgh, PA, USA;* [3]*University of Michigan, Ann Arbor, MI, USA. Contact e-mail: linglerj@pitt.edu*

Background: Emerging literature suggests that disclosing amyloid PET results to cognitively normal adults may have no clinically meaningful effect on psychological well-being. However, revealing these same results in the context of existing cognitive decline may carry very different implications. We examined the short-term effects of amyloid imaging results disclosure on patients with MCI and their caregivers. **Methods:** Our randomized controlled trial of 162 individuals (n=81 patients with MCI; n=81 caregivers) included 41 patient/caregiver dyads allocated to a scan group and 40 to a comparison condition (an MCI education session). Assessments of MCI/AD knowledge, perceived understanding of MCI, self-efficacy for coping with MCI, and mood were conducted at baseline and 4 weeks post-results disclosure (scan group) or post-MCI education session (comparison group). We hypothesized that, irrespective of scan results, having the opportunity to learn more about the potential etiology of cognitive symptoms would improve patients' and caregivers' overall understanding of, and self-efficacy for coping with, MCI. **Results:** Objective knowledge of MCI/AD increased from baseline to week-4 in both the scan and comparison groups among caregivers (F_T=0.05, p=0.002), but not patients. Perceived understanding of MCI decreased in the subgroup of scan patients who were amyloid negative ($F_{G\times T}$=3.37, p=0.041), and was unchanged among other participants. As compared to baseline, caregivers in the scan group reported decreased self-efficacy for coping with their relatives' MCI (mean difference=-12.47±4.4; p<0.01); a finding most pronounced among caregivers of amyloid positive individuals (mean difference=-14.83±7.02; p<0.05). Patients in both the scan and comparison groups reported increased depressive symptoms over time (F_T=6.42, p=0.014), yet overall mood symptoms (depression + anxiety) decreased by 47% from baseline to week-4 within the subgroup of amyloid negative scan patients (p<0.01). Post-disclosure impact of event scores (IGT-AD) were significantly higher in both patients (27.25±3.58 vs. 9.15±5.52; p<0.001) and caregivers (22±3.91 vs. 6.75±1.54; p=0.001) of amyloid positive patients as compared to amyloid negative patients. **Conclusions:** Amyloid negative patients showed improved mood but greater uncertainty about their MCI at follow-up. Significant test-related distress was present in amyloid positive patients and caregivers, with caregivers feeling less able to cope with MCI after learning that it is likely a prodrome to AD.

P4-565 INTACT GLOBAL COGNITIVE AND OLFACTORY ABILITIES PREDICT LACK OF TRANSITION TO DEMENTIA

Davangere P. Devanand[1], Seonjoo Lee[2], Jose A. Luchsinger[3], Edward D. Huey[4], Nicole Schupf[5], Jennifer J. Manly[3], Yaakov Stern[3], William Charles Kreisl[3], Richard Mayeux[3], [1]*Columbia University, College of Physicians and Surgeons, New York, NY, USA;* [2]*New York State Psychiatric Institute, Columbia University Medical Center, New York, NY, USA;* [3]*Columbia University Medical Center, New York, NY, USA;* [4]*Gertrude H. Sergievsky Center at Columbia University, New York, NY, USA;* [5]*Columbia University, New York, NY, USA. Contact e-mail: dpd3@cumc.columbia.edu*

Background: Odor identification deficits characterize Alzheimer's (AD) and other dementias. We examined if intact performance on brief cognitive and odor identification tests predicts lack of transition to dementia. **Methods:** In an urban community cohort, 1,037 older adults without dementia completed the 40-item University of Pennsylvania Smell Identification Test (UPSIT), which includes the 12-item Brief Smell Identification Test (BSIT). Of 749 participants who were followed for up to 4 years, data for 711 participants without anosmia were analyzed. We evaluated the predictive utility of the BSIT and the Blessed Orientation Memory Concentration Test (BOMC) for the transition to dementia, AD and cognitive decline. **Results:** In covariate-adjusted survival analyses, impairment on BOMC (HR 5.42, 95% CI 3.26-9.01, p<.0001) and BSIT (HR 2.11, 95% CI 1.05-4.24, p<.04) each significantly predicted dementia, and AD. Among participants with intact olfactory (BSIT ≥ 11/12 correct) and cognitive (BOMC ≤ 5/28 incorrect) ability, 3.4% (4/117) transitioned to dementia with no transitions in the 70-75 and 81-83 years age group quartiles. In covariate-adjusted logistic regression analyses, impaired BSIT performance was associated with cognitive decline (p<.006), but BOMC was not (p=0.26). **Conclusions:** Brief assessments of odor identification and global cognition can identify individuals who rarely transition to dementia, thereby avoiding unnecessary diagnostic investigation. Identifying these individuals may have potential utility in the decision to exclude patients in treatment trials of cognitively impaired or at-risk patients, or prevention trials in cognitively intact individuals.

P4-566 SUBJECTIVE COGNITIVE DECLINE (SCD) AND MILD BEHAVIORAL IMPAIRMENT (MBI) TOGETHER PREDICT MILD COGNITIVE IMPAIRMENT AT 3 YEARS BETTER THAN EITHER SYNDROME ALONE

Zahinoor Ismail[1], Sophie Hu[2], Sascha Gill[3], Nils D. Forkert[3], Eric E. Smith[1], [1]*University of Calgary, Cumming School of Medicine, Calgary, AB, Canada;* [2]*University of Calgary, Calgary, AB, Canada;* [3]*Hotchkiss Brain Institute, University of Calgary, Calgary, AB, Canada. Contact e-mail: zahinoor@gmail.com*