we calculated total MET-hours/week. SCD was assessed in 2008 and 2012 using a list of six yes/no questions about changes in cognitive function. The average of the 2008 and 2012 answers was used to classify SCD as “good” (54% of men), “moderate” (38%) or “poor” (7.5%). We adjusted for age, profession, smoking, body mass index, adherence to the Alternative Healthy Eating Index as a measure of a healthy diet, diabetes, asthma, hypercholesterolemia, hypertension, cancer, and cardiovascular disease. Adjustments were also made for depression, emphysema, physical impairment, and poor balance. Results: Men in the highest quintile of mid-to-late life physical activity had a 37% lower odds of poor SCD score compared with those in the lowest quintile (multivariable-adjusted odds ratio (OR) 0.63; 95% CI 0.54-0.75; P for trend <0.0001). Among men who had never participated in strenuous physical activity in early adulthood (n=3250, 11%), those who reported the highest tertile of physical activity during mid-to-late life had a 45% lower odds of poor SCD score compared with those in the lowest tertile (multivariable-adjusted OR 0.55; 0.63-0.92). Similarly, the odds of poor SCD score were lower among men who participated in strenuous physical activity in college than among those who did not; this inverse association remained after adjusting for mid-to-late life physical activity (OR 0.78; 95% CI 0.67-0.94).

Conclusions: Being physically active during early adulthood and mid-to-late life are independently associated with lower odds of late-life SCD.

**P1-394 PREVALENCE AND CHARACTERISTICS OF PATIENTS WITH ALZHEIMER’S DISEASE ELIGIBLE FOR A DISEASE MODIFYING DRUG (PANACEA)**

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Background: Two possible (and even plausible) explanations for the failures of recent clinical trials in Alzheimer’s Disease (AD) are the tardiness of the therapeutic intervention and the lack of specificity of the trials’ inclusion criteria. It is now clear that a change in paradigm is underway as new diagnostic criteria have been proposed for AD which can now be diagnosed with a high specificity, even in its early or prodromal phase. If these new trials with their specific inclusion criteria yield the expected results, we will be confronted to an unprecedented “rush toward treatment” from a huge number of patients. These treatments should however be proposed only to those to whom it would benefit. Thus, the characteristics of patients fitting these trial’s inclusion criteria should be identified by expert centers. Methods: We aim to analyze the patients from 11 expert memory centers in France (CMRR for “center of memory research and resources”) which fit the inclusion criteria of these new, optimized clinical trials. To do so, we retrospectively analyze the demographic and clinical characteristics of all patients who consulted in these centers in 2014, had a diagnosis of AD based on the IWG-2 criteria (Amnestic syndrome of the hippocampal type and CSF biomarkers in favor of AD) and scored above 20 in the MMSE. Results: So far, we have access to the data from 7 CMRRs and to 17854 (mean 2550, SD 2342/center) patient’s files with at least a MMSE available in 2014. Among these 17854 patients, only 145 (mean 21, SD 15/center) filled the inclusion criteria for prodromal/mild AD confirmed with the use of CSF biomarkers. Their demographic and clinical characteristics will be the focus of an ongoing analysis. Conclusions: The number of “certified” prodromal or mild typical amnestic AD is surprisingly low in expert memory centers in France, where the use of CSF biomarkers is authorized in clinical practice. This probably reflects the fact that, in the absence of an available disease modifying drug, the need to certify typical AD diagnosis at an early stage remains rare in clinical practice.

**P1-395 PROGRESSION AND PREDICTORS OF MILD COGNITIVE IMPAIRMENT IN CHINESE ELDERLY: A PROSPECTIVE FOLLOW-UP IN THE SHANGHAI AGING STUDY**

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Background: Prospective studies for progression of mild cognitive impairment (MCI) were rarely seen in Chinese population. The Shanghai Aging Study (SAS) is the first community-based study conducted in China for investigating the progression of cognitive decline in elderly, with a study design, operational procedures and diagnostic criteria similar to most cohort studies in developed countries. Methods: As the second wave of the SAS, we prospectively evaluated 362 community residents with MCI diagnosed at the baseline, through a clinical and neuropsychological interview. Diagnoses of dementia, MCI and cognitive normal were made using standard criteria via consensus diagnosis. Results: After the average follow-up of 3.6 years, we diagnosed 79 (21.8%) individuals with dementia and 102 (28.2%) individuals with cognitive normal among 362 individuals diagnosed with MCI at the baseline. The conversion rates from MCI to dementia and to cognitive
normal were 5.8 (95% CI: 4.6-7.0) per 100 person-years and 8.5 (95% CI: 7.0-10.0) per 100 person-years. Individuals with amnestic MCI multiple domains were the most risky ones for dementia, with the conversion rate of 14.3 (95% CI: 10.3-18.3) per 100 person-years. Older age (HR=1.09, 95% CI: 1.05-1.14), apolipoprotein E -e4 positive (HR=2.15, 95% CI: 1.21-3.81), and low Mini-Mental State Examination score (HR=1.18, 95% CI: 1.06-1.28) at baseline were independent risk predictors for the conversion from MCI to dementia. Conclusions: Our findings suggest that 6% of Chinese elderly with MCI progress to dementia annually. Further prospective studies in China are urgently needed to examine risk and protective predictors in order to seek the proper interventions for cognitive decline in the increasing aging population.

Methods: Within the population-based Rotterdam Study, we used the Purdue Pegboard Test (PPT) to assess manual dexterity in 4856 persons (median age 70 years), 277 participants were diagnosed with a neurodegenerative disease, of whom 155 (56%) had Alzheimer’s disease, 72 (26%) another primary dementia diagnosis, 33 (12%) Parkinson’s disease, and 17 (6%) parkinsonism due to other causes. Higher PPT scores were associated with lower risk of incident neurodegenerative diseases (hazard ratio HR=0.78, 95% confidence interval [0.71; 0.85]), and improved risk discrimination of incident neurodegenerative diseases. The association between PPT scores and incident neurodegenerative diseases was stronger in middle-aged participants (age <70 years) than in older participants (p for interaction <0.001). As shown in Table 1, PPT scores were associated separately with incident dementia and incident parkinsonism in both middle-aged and elderly participants. As for dementia, we observed significant associations of PPT scores separately with Alzheimer’s disease (HR=0.82 [0.72;0.93]) and for any other type of dementia (HR=0.72 [0.62;0.84]). Conclusions: A rapid, non-laboratory test of manual dexterity improves prediction of neurodegenerative diseases in the general population. This highlights the importance of motor function in the preclinical phase of both dementia and parkinsonism, and may aid in selecting individuals for refined screening and neuroprotective trials.

Table 1
Manual dexterity and the risk of all-cause and cause-specific parkinsonism and dementia

| Any neurodegenerative disease | Dementia | Parkinsonism |
|-------------------------------|----------|--------------|
| N cases | HR [95%CI] | N cases | HR [95%CI] | N cases | HR [95%CI] |
| Overall | 277 | 0.78 [0.71; 0.85] | 227 | 0.80 [0.72; 0.88] | 50 | 0.82 [0.71; 0.93] |
| ≥70 years | 244 | 0.79 [0.72; 0.87] | 209 | 0.81 [0.73; 0.88] | 35 | 0.73 [0.61; 0.85] |
| <70 years | 33 | 0.66 [0.52; 0.82] | 18 | 0.63 [0.45; 0.89] | 15 | 0.66 [0.44; 0.97] |

HR, hazard ratio per point of average Purdue Pegboard Test score. 95% CI, 95% confidence interval. Analyses are adjusted for age, sex, study cohort, education, smoking, preferred hand, parental history of neurodegenerative diseases, memory complaints and Mini-Mental State Examination.

P1-396 SIMPLE TEST OF MANUAL DEXTERITY CAN IDENTIFY PERSONS AT HIGH RISK FOR NEURODEGENERATIVE DISEASES IN THE COMMUNITY

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Background: Early identification of individuals at high risk of developing neurodegenerative diseases is essential for timely preventive intervention. However, simple methods that can be used for risk assessment in general practice are lacking. Methods: Within the population-based Rotterdam Study, we used the Purdue Pegboard Test (PPT) to assess manual dexterity in 4856 persons (median age 70 years, 58% women) free of parkinsonism and dementia between 2000 and 2004. We followed these persons until 1 January 2012 for the onset of neurodegenerative diseases (defined as first diagnosis of parkinsonism or dementia). We determined the association of PPT scores with incident neurodegenerative disease, adjusting for age, sex, study cohort, level of education, smoking, preferred hand, parental history, subjective memory complaints and Mini-Mental State Examination. Furthermore, we determined the incremental predictive value of PPT, expressed as change in risk classification and discrimination. Results: During follow-up (median 9.2 years), 277 participants were diagnosed with a neurodegenerative disease, of whom 155 (56%) had Alzheimer’s disease, 72 (26%) another primary dementia diagnosis, 33 (12%) Parkinson’s disease, and 17 (6%) parkinsonism due to other causes. Higher PPT scores were associated with lower risk of incident neurodegenerative diseases (hazard ratio HR=0.78, 95% confidence interval [0.71; 0.85]), and improved risk discrimination of incident neurodegenerative diseases. The association between PPT scores and incident neurodegenerative diseases was stronger in middle-aged participants (age <70 years) than in older participants (p for interaction <0.001). As shown in Table 1, PPT scores were associated separately with incident dementia and incident parkinsonism in both middle-aged and elderly participants. As for dementia, we observed significant associations of PPT scores separately with Alzheimer’s disease (HR=0.82 [0.72;0.93]) and for any other type of dementia (HR=0.72 [0.62;0.84]). Conclusions: A rapid, non-laboratory test of manual dexterity improves prediction of neurodegenerative diseases in the general population. This highlights the importance of motor function in the preclinical phase of both dementia and parkinsonism, and may aid in selecting individuals for refined screening and neuroprotective trials.

P1-397 SLEEP DISORDERED BREATHING, CSF P-TAU, HIPPOCAMPAL ATROPHY AND ß-AMYLOID DEPOSITION IN MILD COGNITIVE IMPAIRMENT PATIENTS

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