compared to AD group: 115.3±32.1vs 88.9±13.2 mg/dL ($p<0.0001$), and controls 90.2±12.4 mg/dL ($p<0.0001$). No difference was recorded in mean TG or FPG between AD patients and controls. When classified by decennial age strata, a same pattern of results was recorded for all subgroups. Across dementia staging by CDR, mean cholesterol, triglycerides, and glucose levels were significantly higher in VaD compared to AD group across all CDR subgroups. Differences persisted when VaD patients were classified by disease duration subgroups. **Conclusions:** These results suggest that there are substantial differences in the studied biochemical parameters, which may prove valuable in helping to distinguish appreciatively subjects with AD from those with VaD, at any time point of the disease course, i.e. mild vs frank hypercholesterolemia, normal vs normal or higher triglyceridemia, normal vs normal or higher glycemia, in AD vs VaD respectively.

P2-064 SHANGHAI COMMUNITY BRAIN HEALTH INITIATIVE (SCOBHI) PILOT STUDY: METHODS AND PARTICIPATION RATES

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Background: China is facing a demographic epidemic, with 300 million elders age 65 and over anticipated by 2030. We are planning a large community-based cohort study and tested the feasibility of conducting such a study in Shanghai. **Methods:** We conducted a pilot study between May and November 2008. Goals were to establish the feasibility of collecting detailed data on risk factors, diet, medical, family history, MRI, blood and urine for a large cohort study of early detection and prevention of dementia. MCI and dementia cases presented to the Memory Disorders Clinic at Huashan Hospital. Controls were recruited from the community by door-to-door approach. All subjects were seen by a study neurologist and completed a comprehensive neuropsychological battery and MRI and were diagnosed by consensus diagnosis using standard clinical criteria. **Results:** 59 potential controls were approached; 3.3% were unable to be contacted and 12% refused. Of the remaining 49, 4% were demented, 18% had MCI, 73% were normal controls after examination and 4% were followed over time. The participation rate among controls was 83%. 109 cases were approached, 8% were unable to be contacted and 35% refused, with a participation rate of 57%. We analyzed an age- and sex- matched set of 32 controls, 34 MCI cases and 34 dementia cases. For controls, mean age was 73.4 (sd=5.5), education=10.8 years (sd=4.9) with 50% female. MCI cases were on average 74.9 (sd=3.9) years old with mean education=11.1 years (sd=5.9); 50% were female. Dementia cases were 74.3 (sd=5.6) years old with mean education=9.2 years (sd=5.8); 50% were female. All participants received the complete evaluation and completed detailed interviews (controls and case and control proxies). **Conclusions:** A strong participation rate is achievable from recruitment of community-based elders in Shanghai. The collection of detailed risk factor and medical histories, as well as clinical and neuropsychological data, acquisition of blood, urine and MRI is highly feasible. 83% of community-based subjects participated in detailed epidemiologic and clinical evaluations. Our planned cohort study will be fielded in a population in which a high validity can be achieved.

P2-065 A MEGALIN POLYMORPHISM ASSOCIATED WITH INCREASED ALZHEIMER'S DISEASE RISK

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Background: Elevated cerebral levels of amyloid beta-protein (Aβ) occur universally in Alzheimer's disease, yet only a few patients show evidence of increased Aβ production. This observation suggests that many, perhaps most, cases of AD are caused by faulty clearance of Aβ that is produced at normal levels throughout life. In this context, lipoprotein receptor-related protein-2 (LRP2)/megalin, which plays an important role mediating Aβ clearance, is an attractive candidate gene for genetic asscociation with AD. **Methods:** To investigate this possible association, we screened the megalin gene for three well-know single-nucleotide polymorphisms (SNPs) in 760 AD patients and 604 non-AD subjects. **Results:** Genetic analysis indicated that the frequency of -868A/A genotype, in the megalin promoter, was significantly greater in AD patients than in control subjects (0.19 to 0.12, $p < 0.015$). Furthermore, luciferase reporter assay indicated that -868A/A genotype has 20% less transcriptional activity than -868G/G. **Conclusions:** Then, we suggest that megalin promoter polymorphism could be associated with decreased megalin expression. The present study provides strong evidence that megalin promoter polymorphism confer greater risk for AD, probably by reducing its expression and physiology effects, and confirm the biological role of megalin in neurodegenerative processes of AD.

P2-066 WEB-BASED APPLICATION TO ESTIMATE AND PROJECT THE BURDEN OF ALZHEIMER'S DISEASE AND EVALUATE THE IMPACT OF POTENTIAL INTERVENTIONS

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Background: Projecting the future burden of Alzheimer's disease is useful for health care planning purposes. Additionally, researchers and policy makers are interested in evaluating the impact of potential interventions that may reduce disease risk or slow disease progression. **Methods:** Brookmeyer, et al (2007) developed and implemented a multi-stage, incidence to prevalence disease model to estimate and project the global prevalence of AD. The model allows for the introduction of potential interventions that either reduce risk or slow progression which assesses the impact of an intervention on the burden of disease by stage. We have expanded the model to incorporate associated health care costs and DALYs (disability adjusted life years). We adapted the model into a web-based application where the user may specify inputs related to incidence, disease progression, the impact of AD on mortality, costs, and DALYs. **Results:** The application is located on a server at the Bloomberg School of Public Health, Johns Hopkins University. The user specifies the input parameters or selects predefined inputs. For the specified population, the model generates annual, gender- and stage-specific AD prevalence projections for a 50-year interval, along with associated costs and DALYs. The user may input aspects related to treatments such as reducing risk or slowing progression and then evaluate the subsequent effect on disease burden, health care cost or DALYS. By running several simulations with varying input parameters, the sensitivity of the results may be assessed. **Conclusions:** A web-based application allows a user to generate population-specific projections of AD burden, costs, and DALYs, along with the ability to explore the impact of interventions that reduce risk or slow progression.