

NEUROLOGICAL DISEASES/DISORDERS & PAIN—Economic Outcomes**CHOLINESTERASE INHIBITORS REDUCE INSTITUTIONALIZATION RISK AND MAY REDUCE OVERALL ECONOMIC BURDEN FOR PATIENTS WITH DEMENTIA IN A NATURALISTIC TREATMENT SETTING**Luong D¹, Sambrook R², Yu A², COSID Investigators³¹Janssen Ortho Inc, Toronto, ON, Canada; ²Syreon Corporation, Vancouver, BC, Canada; ³Canada

OBJECTIVE: Cholinesterase inhibitors have been shown to delay institutionalization, thus reducing costs. Institutionalization rates, direct, indirect and drug costs were examined in the Canadian Outcomes Study in Dementia (COSID); an ongoing observational cohort study of clinical and economic outcomes for dementia patients in Canada. **METHODS:** A Cox Proportional Hazards regression model compared institutionalization rates between patients receiving (ChI) or not receiving cholinesterase inhibitors (non-ChI) at the time of enrolment (n = 448). A linear regression model also compared direct outpatient and inpatient costs (e.g. hospitalisations, community services, day surgery), indirect costs (lost caregiver and patient productivity) and drug costs (including and excluding ChI costs) in the ChI and non-ChI groups. Both models adjusted for dementia type, place of residence, disease duration, baseline Global Deterioration Stage and Caregiver Burden (ZBI), age and gender. Follow-up was from baseline to last visit date (between 6 and 18 months). **RESULTS:** This model-based assessment shows strong evidence that treatment with ChIs is associated with reduced institutionalization risk (RR = 0.262, p = .0032). Because most patients were lost to follow-up on or shortly after institutionalization, this analysis does not account for the cost of institutionalization. However, reducing the rate of institutionalization almost certainly yields significant cost savings. Other significant predictors of risk include baseline ZBI (RR = 1.033 per point, p = .0394) and age (RR = 1.107 per year, p = .0085). The linear regression model for costs demonstrated no significant differences in inpatient (excluding institutionalization), indirect and overall costs between non-ChI and ChI patients. Drug costs were estimated to be \$134 per month greater for the ChI group than the non-ChI group (\$168 vs \$34, p < .0001). **CONCLUSIONS:** The use of ChIs appeared to have a significant effect on institutionalization rates and drug costs, but not on other cost drivers in this disease. The reduced rate of institutionalization likely translates into cost savings for the ChI treatment strategy.

PNP1**ECONOMIC IMPACT OF TREATMENT OF DEMENTIA FOR GERMANY—A PROGNOSIS TO 2050**Happich MV¹, Hallauer J²¹Technical University, Berlin, Germany; ²Charité, University Hospital, Berlin, Germany

OBJECTIVE: To assess the development of costs for dementia in Germany until 2050 under different demographic scenarios and the possible impact of treatment interventions with acetylcholinesterase inhibitors from various perspectives. **METHODS:** A model to estimate cost differences in dementia treatment with acetylcholinesterase inhibitors compared to a placebo scenario was developed. The model projects the number of dementia patients in Germany until 2050 under the assumption of extended life expectancy and immigration. Markov modeling allows documenting the progression of dementia patients into more severe disease stages. Data of the population development are supplied by the Federal Bureau of Statistics and the German Institute for Economic Research. Number of patients are calculated from demographic prognoses considering prevalence of disease data from a published metaanalysis of the epidemiology of dementia. Data about transition probabilities between different disease stages are derived from a randomized clinical trial of an acetylcholinesterase drug. Disease stage specific costs are taken from a cost of illness study previously published. **RESULTS:** The number of dementia patients will increase from 1 million to 2.5 million over the next 50 years in Germany. With treatment, there will be 30% less patients in the most severe, and hence most costly disease stage. Costs for treatment are offset by cost savings through a shift of patients to less severe disease stages, if indirect family and caring costs are considered. Reduction of direct costs due to treatment increase from €0.5 to €1.5 billion and indirect cost reductions are fourfold these figures. For 2000, net savings of €1.4 billion are demonstrated for the societal perspective. Results are stable for extensive sensitivity analysis. **CONCLUSION:** Results document that dementia treatment is economically attractive in an aging society.

PNP2**SOCIO-ECONOMIC IMPACT OF CHRONIC DAILY HEADACHE IN THE GENERAL POPULATION IN FRANCE**Lantéri-Minet M¹, Auray JP², Chazot G³, Dartigues JF⁴, Duru G⁵, Henry P⁶, Lucas C⁷, Pradalier A⁸, el Hasnaoui A⁹, Gaudin AF⁹¹Hospital Pasteur, Nice, France; ²Université Lyon, Villeurbanne, France; ³Hopital Cardio Vasculaire, Bron, France; ⁴Université Bordeaux, Bordeaux, France; ⁵Université Claude Bernard, Villeurbanne, France; ⁶CHU Bordeaux, Bordeaux, France; ⁷Hopital Roger Salengro, Lille, France; ⁸Hopital Louis Mourier, Colombes, France; ⁹Laboratory GSK, Marly le Roi, France**PNP3**