model was used. In this model a cohort of 10,000 bipolar I disorder patients was created using Dutch data on relevant patient characteristics. This cohort was then used for the comparison of the different treatment options. The treatment options compared in the model were: 1). quetiapine & lithium; 2). olanzapine & lithium; and 3). risperidon & lithium. For effectiveness four trials on quetiapine were used. The effect measure was the number of serious side effects. Serious side effects were: extra pyramidal symptoms and/or more than 7% weight gain. Included costs were: drug costs, hospital costs, hospital visits and laboratory tests (2003 price levels). RESULTS: For the combination therapy of quetiapine & lithium, the incremental net costs per serious side effect averted were €1203 compared to risperidon & lithium and €3481 compared to olanzapine & lithium. The effectiveness on hospital stay is comparable over the three combination therapies compared. CONCLUSIONS: Serious side effects may be averted with quetiapine & lithium therapy at incremental costs. Whether these costs are acceptable requires further research into the ‘willingness to pay’ to avert one serious side effect.

**PMH15**

**GALANTAMINE REDUCES CAREGIVER BURDEN: RESULTS FROM A NATURALISTIC STUDY**

Nguyen E1, Camacho F2, Luong D1

1Janssen-Ortho Inc, Toronto, ON, Canada; 2Damos Inc, Toronto, ON, Canada

**OBJECTIVES:** To determine the contribution of behavioural symptoms to the costs associated with caring for patients with dementia. **METHODS:** Data from the Canadian Outcomes Study in Dementia (COSID), a 3-year prospective study of community-dwelling dementia patients was examined. Cognition was assessed with the Mini-Mental State Examination (MMSE) and behaviour with the Neuropsychiatry Inventory (NPI). Resource utilization was evaluated monthly with caregiver-completed resource use (RU) questionnaires, which included frequency of community resource use (e.g., home care nurses, Meals-on-Wheels, etc.), hospitalization and respite care, outpatient visits and drug use (direct costs), as well as questions about time away from work or leisure activities for both patient and caregiver (indirect costs). Costs were calculated in 2000 Canadian dollars. **RESULTS:** Five hundred dementia patients and their caregivers who provided a minimum of 6 of 12 completed RU questionnaires were included in this 1-year preliminary analysis. At baseline, average age of patients was 76.3 (±6.3), 47% were male, and 82% were diagnosed with AD. Average MMSE was 22.4 (±4.5) and average NPI 8.8 (±11.1; range 0–69). Total costs were estimated at €1298 per month (€113 for medication costs, €237 for other direct costs, and €948 for indirect costs). An analysis of covariance model, that included NPI, MMSE, gender, age, marital status, dementia diagnosis, type of residence, region of Canada, and number of medical comorbidities, showed that greater cognitive impairment, i.e., lower MMSE (F = 12.77, p < 0.0004), female gender (F = 9.31, p = 0.0024) and non-AD dementia diagnosis (F = 6.27, p = 0.0126) were significant covariates. After accounting for the covariates, there was a significant association between cost and NPI (F = 22.46, p < 0.0001). The incremental cost of a one-point increase in NPI score was €32 per month (95% CI $18–$45). **CONCLUSIONS:** Behavioural and psychological symptoms of dementia (BPSD) contribute significantly to the total costs of caring for community dwelling dementia patients.

**PMH16**

**EFFECT OF BEHAVIOURAL AND PSYCHOLOGICAL SYMPTOMS OF DEMENTIA (BPSD) ON COST OF CARE IN THE CANADIAN OUTCOMES STUDY IN DEMENTIA**

Herrmann N1, Lancoët K1, Nguyen E2, Sambrook R3, Lesnikova N1

1University of Toronto and Sunnybrook & Women’s College Health Sciences Centre, Toronto, ON, Canada; 2Janssen-Ortho Inc, Toronto, ON, Canada; 3Syreon Corporation, Vancouver, BC, Canada

**OBJECTIVES:** To determine the contribution of behavioural symptoms to the costs associated with caring for patients with dementia. **METHODS:** Data from the Canadian Outcomes Study in Dementia (COSID), a 3-year prospective study of community-dwelling dementia patients was examined. Cognition was assessed with the Mini-Mental State Examination (MMSE) and behaviour with the Neuropsychiatry Inventory (NPI). Resource utilization was evaluated monthly with caregiver-completed resource use (RU) questionnaires, which included frequency of community resource use (e.g., home care nurses, Meals-on-Wheels, etc.), hospitalization and respite care, outpatient visits and drug use (direct costs), as well as questions about time away from work or leisure activities for both patient and caregiver (indirect costs). Costs were calculated in 2000 Canadian dollars. **RESULTS:** Five hundred dementia patients and their caregivers who provided a minimum of 6 of 12 completed RU questionnaires were included in this 1-year preliminary analysis. At baseline, average age of patients was 76.3 (±6.3), 47% were male, and 82% were diagnosed with AD. Average MMSE was 22.4 (±4.5) and average NPI 8.8 (±11.1; range 0–69). Total costs were estimated at €1298 per month (€113 for medication costs, €237 for other direct costs, and €948 for indirect costs). An analysis of covariance model, that included NPI, MMSE, gender, age, marital status, dementia diagnosis, type of residence, region of Canada, and number of medical comorbidities, showed that greater cognitive impairment, i.e., lower MMSE (F = 12.77, p < 0.0004), female gender (F = 9.31, p = 0.0024) and non-AD dementia diagnosis (F = 6.27, p = 0.0126) were significant covariates. After accounting for the covariates, there was a significant association between cost and NPI (F = 22.46, p < 0.0001). The incremental cost of a one-point increase in NPI score was €32 per month (95% CI $18–$45). **CONCLUSIONS:** Behavioural and psychological symptoms of dementia (BPSD) contribute significantly to the total costs of caring for community dwelling dementia patients.