matched samples of employees with osteoarthritis (OA) and non-FM controls. METHODS: Samples were selected from a U.S. claims database of privately insured beneficiaries. Employees in the FM sample had ≥2 fibromyalgia diagnoses in 1999–2005 (with ≥1 in 2002–2005) and were continuously enrolled in 2005. Controls and employees with OA had no FM claims and were matched to the study sample on age, gender, and region. Costs are reported for 2005 experience. Nonparametric Wilcoxon tests were used to determine statistically significant differences in skewed variables including costs. Chi-square tests were used to test for differences in categorical variables. RESULTS: Mean age in the FM sample was 50.1 years and 51.6% were female. Compared to control and OA samples, employees with FM had higher rates of depression, anxiety, chronic fatigue syndrome, and many pain diagnoses. The FM sample used more medical care overall, especially emergency department visits, specialty physician visits, and prescriptions. Direct (medical and prescription drug) costs in the FM sample were significantly higher than control sample costs ($7286 vs. $3915, p < 0.0001), and approached OA sample costs ($7286 vs. $8325, p = 0.3758). Prescription costs comprised a relatively large proportion of total FM costs; prescription cost levels were comparable to employees with OA ($1630 vs. $1341, p < 0.3541) and significantly higher than controls ($1630 vs. $755, p < 0.0001). Work loss costs in the FM sample ($2913) were significantly higher than those of control ($1359, p < 0.0001) and OA ($2537, p < 0.0001) samples. CONCLUSIONS: Fibromyalgia imposes significant economic burden. Average total costs among employees with fibromyalgia were almost twice those of matched controls and approximated costs of employees with osteoarthritis. Indirect costs were more than double those of controls and even exceeded costs of osteoarthritis patients with similar demographic profiles.

IMPACT OF PATIENT COMORBIDITIES ON PHARMACOLOGICAL TREATMENT OF INSOMNIA: AN ANALYSIS OF THE NATIONAL AMBULATORY MEDICAL CARE SURVEY DATA: 1995–2004
Pawaskar MD, Balkrishnan R.
The Ohio State University College of Pharmacy, Columbus, OH, USA
OBJECTIVES: Patients with insomnia are likely to have comorbidities that could affect treatment options. Hence the objective of this study was to examine the prevalence of comorbidities and their impact on the pharmacological treatment of insomnia in US primary care settings. METHODS: A retrospective data analysis of the National Ambulatory Medical Care Survey from 1995 to 2004 was performed. Patients aged ≥18 years, who had a physician visit with a diagnosis of insomnia in US outpatient settings were included in this study. Office visits of patients with primary or secondary insomnia/sleep complaints and resultant diagnoses were included in the analysis. Data were stratified according to patient characteristics, physician specialty, resulting diagnosis and medications prescribed. Multivariate logistic regression models were used to examine impact on prescribing pharmacotherapy for insomnia. RESULTS: A total of 5487 unweighted patient visits for insomnia were identified from the year 1995–2004, representing 107.4 million patients in the overall U.S. population. Official visits for insomnia were more common in females (60.4%), with an increasing prevalence in older patients. Approximately 41% of the patients with insomnia had a concomitant diagnosis of a mental comorbidity with higher prevalence of anxiety (15.6%) followed by episodic mood disorders (14.9%) and depression (7%). Patients with mental comorbidities were 35% less likely to receive pharmacological treatment for insomnia than those without mental comorbidities (OR: 0.65, 95% CI: 0.51–0.84). Subgroup analysis of type of mental comorbidity revealed that patients with comorbid anxiety were 42% less likely to receive pharmacological treatment for insomnia than those without anxiety (OR: 0.58, 95% CI: 0.45–0.73). CONCLUSION: Mental comorbidities such as episodic mood disorder, anxiety, and depression are prevalent in patients with insomnia and affect receipt of pharmacological therapy for insomnia. Health care professionals should consider the impact of mental comorbidities while treating patients with sleep difficulties.

THE IMPORTANCE OF MODIFYING THE COURSE OF ALZHEIMER’S DISEASE: OLDER AMERICANS’ RISK-BENEFIT PREFERENCES FOR NEW TREATMENTS
Mohamed AF1, Johnson FR1, Hauber B2, Leibman C3, Arrighi HM1
1Research Triangle Institute, Research Triangle Park, NC, USA; 2Research Triangle Institute, Doylestown, PA, USA; 3Elan Pharmaceuticals, Inc, San Diego, CA, USA
OBJECTIVES: The objective of this study is to quantify the strength of preferences of older Americans for possible Alzheimer’s disease (AD) treatment benefits by estimating their willingness to accept the risk of death or severe disability in exchange for modifying the course of AD. Currently, AD has no cure. A breakthrough in treatment that modifies the underlying AD disease process would be a major achievement with enormous medical and social benefits. Little is known concerning older Americans’ perceptions about AD and their willingness to accept risk to avoid AD. METHODS: American residents aged 60 years and older who have not been diagnosed with AD, and are not taking prescription medicines to treat AD, memory problems or dementia completed an online survey questionnaire that included a series of stated-choice trade-off tasks. Respondents chose between pairs of hypothetical treatment alternatives, each including different 7-year AD disease-progression profiles and risks of serious adverse events that would result in death or severe disability. We used mixed-logit methods to estimate the maximum acceptable risk (MAR) of serious adverse events that would result in death or severe disability, RESULTS: 2146 respondents completed the survey. Mean (SD) age was 70 (7.4). In return for preventing AD from progressing beyond the mild stage, the mean MAR (95% CI) was 46.8% (40.3%–54.3%); that is older Americans were willing, on average, to accept an increase in the risk of death or severe disability from stroke of nearly 50% to avoid progression to the moderate and severe stages of AD. CONCLUSION: Older Americans’ willingness to accept significant increases in the risk of death or disability in exchange for treatments that modify the course of AD indicates the value of such treatment benefits.

COST-UTILITY ANALYSIS EVALUATING LIDOCAINE 5% MEDICATED PLASTER RELATIVE TO GABAPENTIN FOR POST-HERPETIC NEURALGIA IN SCOTLAND
Dakin HA1, Nuijten MJ2, Liedgens H3, Poulsen Nastrup B4
1Abacus International, Bicester, Oxfordshire, UK; 2Erasmus University, Rotterdam, The Netherlands; 3Grüenthal GmbH, Aachen, Germany
OBJECTIVES: To assess the cost-effectiveness of using a lido- caine 5% medicated plaster (lidocaine plaster) in the treatment of post-herpetic neuralgia (PHN) in place of gabapentin from the perspective of the Scottish National Health Service. METHODS: A Markov model was constructed in TreeAge to calculate the costs and benefits of gabapentin and lidocaine plaster when used in primary care over a six-month time horizon in patients with
PHN who have insufficient pain relief with standard analgesics and do not tolerate or are contraindicated to tricyclic antidepressants. The model structure allowed for differences in costs, utilities and transition probabilities between the initial 30-day run-in period and maintenance therapy and also took account of other medications that are added in alongside gabapentin/lidocaine plaster and those received by patients discontinuing gabapentin/lidocaine plaster. Most transition probabilities were based on clinical trials identified through a systematic literature review. Missing data, including resource utilization, were obtained from a Delphi panel and cost data from official price lists and tariffs. Utilities derived from a published study using the Health Utilities Index were adjusted for age and were supplemented and validated by the Delphi panel. RESULTS: The total cost for lidocaine plaster was £938 per patient, compared with £789 for gabapentin, although lidocaine plaster generated 0.292 quality-adjusted life-years (QALYs), compared with 0.248 for gabapentin. Lidocaine plaster therefore cost £3767 ($7370; 95% confidence interval: dominant, £13,415) per QALY gained relative to gabapentin. Probabilistic sensitivity analysis demonstrated that we can be 98.7% confident that lidocaine plaster is cost-effective relative to gabapentin at a £20,000/QALY threshold and 65% confident at a £50,000/QALY threshold. Scenario analyses and extensive one-way sensitivity analyses on all parameters including the time horizon confirmed the robustness of the results. CONCLUSION: The lidocaine 5% plaster is a highly cost-effective treatment for PHN in Scotland.

PODIUM SESSION II: RESPIRATORY DISORDERS

RS1
COST EFFECTIVENESS OF QUANTIFERON IN SCREENING FOR TUBERCULOSIS INFECTION IN CLOSE CONTACTS IN JAPAN
Kawada A1, Takahashi O2, Shimbo T1, Tokuda Y3, Ohde S1, Yanai H1, Rahman M1, Fukui T1
1Kanamachi Public Health Center; Tokyo, Japan, 2St. Luke’s Life Science Institute, Chuo, Tokyo, Japan, 3International Medical Center of Japan, Shinjyuku-ku, Tokyo, Japan, 4St. Luke’s School of Nursing, Chuo, Tokyo, Japan
OBJECTIVES: QuantIFERON-TB Gold assay (QFT-G) is a recently approved blood test for detection of tuberculosis (TB) infection. The advantages of tuberculin skin test (TST) are; recent and 65% confident at a £5000/QALY threshold. Scenario analyses and extensive one-way sensitivity analyses on all parameters including the time horizon confirmed the robustness of the results. CONCLUSION: The lidocaine 5% plaster is a highly cost-effective treatment for PHN in Scotland.

The lidocaine 5% plaster is a highly cost-effective treatment for PHN in Scotland.

INCIDENTAL COSTS ASSOCIATED WITH ANTIBIOTICS PRESCRIBED FOR COMMUNITY ACQUIRED PNEUMONIA
Asche C1, Mucha L2, Lenhart G1, Seal B2
1University of Utah, Salt Lake City, UT, USA, 2Thomson Medstat: Medstat, Cambridge, MA, USA
OBJECTIVES: The purpose of this study was to estimate the total and incremental costs associated with antibiotic treatments for community acquired pneumonia (CAP). METHODS: Persons over age 18 were identified in the Marketscan databases July-December 2004. We identified CAP episodes for patients with claims for ICD9 codes 481.XX–486.XX, plus the most frequent antibiotics prescribed as initial treatment for an episode. Logistic regression estimated a propensity score for each patient; which was the predicted probability of using telithromycin. Patients were then matched according to this probability. Then exponential conditional means models (ECM) were specified, controlling for variables that were still significantly different after the propensity score matching. These models allowed the incremental costs to be estimated for treatment of telithromycin relative to other antibiotics. RESULTS: The most common initial antibiotic treatments compared to telithromycin for CAP (n = 187 CAP episodes) were amoxicillin, azithromycin, clarithromycin, levofloxacin, moxifloxacin, and a group of all other antibiotics. The mean length of a CAP episode was from 11.5 to 16.3 days. Mean total expenditures among the episodes was $897, with a range of $530 to $1175. Multivariate ECM models were fitted and showed significant incremental cost reductions per episode associated with telithromycin relative to: amoxicillin ($−29, p = 0.002), azithromycin ($−68, p < 0.001), levofloxacin ($−41, p < 0.001), and moxifloxacin ($−484, p < 0.001). The difference between telithromycin and clarithromycin ($−52) was not significant. CONCLUSION: The results of this study show that the costs differed among episodes of CAP by the initiating antibiotic. Use of propensity score matching and ECM regression controlled for intra-episode differences, so the incremental costs differences may be attributed to factors such as length of episode. The costs of CAP can be substantial and it is important to note that the initiating antibiotic may affect these costs.

THE HEALTH STATUS BURDEN OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) IN A U.S. MEDICARE POPULATION: FINDINGS FROM THE MEDICARE CURRENT BENEFICIARY SURVEY
Mezniej L1, Duran H2, Guadagno L3, Dirani RG4, Marxon JP2, Phillips AL1, Shah H1
1Boston Health Economics, Inc, Waltham, MA, USA, 2Boehringer-Ingelheim Pharmaceuticals, Inc, Ridgefield, CT, USA, 3Pfizer Global Pharmaceuticals, Pfizer Inc, New York, NY, USA
OBJECTIVES: With increasing longevity among the elderly, it is important to better understand the impact of chronic disease on general health status. The objective of this study was to quantify the health status burden of COPD for a nationally repre-