

PCN77

(For EC4 see page A228)

PHARMACOECONOMIC ANALYSIS OF ERLOTINIB COMPARED WITH DOCETAXEL FOR THE TREATMENT OF RELAPSED NON-SMALL-CELL LUNG CANCER (NSCLC) IN TURKEY

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OBJECTIVES: To perform a cost-utility analysis of erlotinib compared with docetaxel for treatment of advanced NSCLC following the failure of prior chemotherapy from the perspective of the Turkey health care system. **METHODS:** A cost-utility analysis was performed using a transition model with three health states (progression free, progression, death); primary endpoint of cost per quality-adjusted life year (QALY) gained. The model compared the impact of erlotinib or docetaxel therapy over a 2-year period (cycle length of 1 month) in patients with stage IIIB/IV NSCLC who had failed at least one prior chemotherapy regimen. Clinical data from the BR.21 (erlotinib) and TAX317 (docetaxel) phase III studies were used; for the purposes of this analysis, it was conservatively assumed that overall survival was equivalent for the two interventions. The time spent in each health state was adjusted for quality of life, including the impact of adverse events (AEs). Costs included were: resource utilisation for each health state and AE (including hospitalisation, physician visits, outpatient examinations, concomitant medicines and required tests), drug acquisition and administration. **RESULTS:** The total discounted cost of erlotinib was 21,498 YTL (€11,943), compared with 21,667 YTL (€12,037) for docetaxel. Erlotinib was associated with higher QALYs than docetaxel (0.258 versus 0.206; incremental QALYs = 0.053), mainly due to the lower incidence of AEs and the administration route (oral, versus intravenous for docetaxel). Erlotinib was dominant versus docetaxel, with an incremental cost-effectiveness ratio of -3227 YTL (-€1792) per QALY gained. **CONCLUSION:** This is the first pharmacoeconomic modelling analysis performed for the setting of the Turkish health care system. The results show that erlotinib is dominant versus docetaxel for the treatment of relapsed advanced NSCLC, providing higher QALYs at a lower cost. A major contributing factor to the cost-savings observed with erlotinib is its favourable AE profile, particularly its lack of haematological toxicity.

PODIUM SESSION III: HEALTH CARE USE & POLICY STUDIES

HPI

HEALTH SYSTEM CORRELATES OF RECEIPT OF RADIATION AFTER BREAST CONSERVING SURGERY IN LOW-INCOME MEDICAID-ENROLLED WOMENAnderson RT¹, Balkrishnan R²¹Wake Forest University School of Medicine, Winston Salem, NC, USA, ²The Ohio State University College of Pharmacy, Columbus, OH, USA

OBJECTIVES: Breast-conserving surgery (BCS), followed by radiation therapy (RT) is a safe and effective alternative to mastectomy for most women with early stage breast cancer based on evidence from prospective randomized trials, and has become the preferred surgical option. Omission of RT after BCS, however, is increasingly common and leads to poor outcomes. Few studies examine patient and health system correlates to receipt of RT after BCS, especially in a low income population. This study described patient and health care systems correlates of receipt of recommended care with BCS in North Carolina (NC) indicated by receipt of adjuvant RT. **METHODS:** Subjects were women diagnosed with primary breast cancer in 1998 and 1999 who

were classified as alive at least 12 months post-treatment with BCS (N = 344). Medicaid claims were obtained to supplement central cancer registry data on adjuvant RT; state county data were obtained on health provider shortage regions. **RESULTS:** Of 344 women in NC enrolled in Medicaid and treated with BCS during the period of study, one third did not receive RT. The following factors were associated with lack of receipt of RT after BCS older age (65 > years), residence in a low population density county, receiving BCS at a smaller-sized hospital, and living in a county classified as whole-county specialist scarcity area (all $p < 0.05$ in multivariate analyses). **CONCLUSION:** Some low income women do not access RT following BCS, placing them at risk for recurrence. We identified geographic isolation and scarcity of health care as possible leverage points for interventions.

HP2

ASSOCIATIONS BETWEEN NEGATIVE SYMPTOMS, SERVICE USE, AND COSTS FOR PATIENTS WITH SCHIZOPHRENIA IN FIVE EUROPEAN COUNTRIESLeeuwenkamp O¹, Knapp M², McCrone P³¹NV Organon, Molenstraat, Oss, The Netherlands, ²London School of Economics, London, UK, ³King's College London, London, UK

OBJECTIVES: To allocate mental health resources effectively, data are needed on resource use and costs associated with schizophrenia. We analyzed the use and costs of clinical services in patients with vs without negative symptoms of schizophrenia. **METHODS:** Data were drawn from the cross-sectional European Psychiatric Services: Inputs Linked to Outcome Domains and Needs (EPSILON) study, which was conducted in Amsterdam, The Netherlands; Copenhagen, Denmark; London, England; Santander, Spain; and Verona, Italy. Using Brief Psychiatric Rating Scale (BPRS) data, we produced three alternative measures of negative symptoms: 1) a binary variable indicating presence or absence of negative symptoms; 2) mean score for individual BPRS negative symptom items; and 3) principal components analysis of BPRS negative symptom items. We used multiple regression models to analyze the impact of negative symptoms on the use and costs of inpatient, outpatient, and community-based services, controlling for age, sex, marital status, employment status, race, education, psychiatric history, and study center. **RESULTS:** Negative symptoms were present in 247 of 404 patients, with the lowest prevalence in Verona (49%) and the highest in Amsterdam (79%). Compared with patients with no negative symptoms, patients with negative symptoms incurred higher mean costs for inpatient care (68% higher), day care (116% higher), community services (48% higher), residential care (180% higher), and total costs (68% higher) but lower costs for outpatient care (42% lower). After adjusting for socio-demographic and clinical variables, negative symptoms were still significantly associated with higher inpatient and total costs. In the analysis of service use, a significant inverse relationship was seen between the negative symptoms component score and use of outpatient services. **CONCLUSION:** In this study of patients with schizophrenia in five European countries, negative symptoms were most consistently correlated with higher inpatient and total costs. Further investigation is merited.

HP3

ASSESSING THE IMPACT OF A NATIONAL DRUG BENEFIT PROGRAM ON THE USE OF GENERIC DRUGS AND DIFFERENT THERAPEUTIC CLASSESZhang JX¹, Yin W¹, Sun SX², Lee KY², Meltzer DO¹, Alexander GC¹¹University of Chicago, Chicago, IL, USA, ²Walgreens Health Services, Deerfield, IL, USA

OBJECTIVES: To examine changes in the utilization of prescription medicines from 16 therapeutic classes from 2005 to 2006