

**PODIUM SESSION III: ECONOMICS OF CANCER**

EC1

**RESOURCE USE AND COST OF DIAGNOSTIC WORKUP OF WOMEN WITH SUSPECTED BREAST CANCER**Lee DW<sup>1</sup>, Stang PE<sup>2</sup>, Goldberg GA<sup>3</sup>, Haberman M<sup>4</sup><sup>1</sup>GE Healthcare, Waukesha, WI, USA, <sup>2</sup>Independent Consultant, Blue Bell, PA, USA, <sup>3</sup>Innovus, Santa Monica, CA, USA, <sup>4</sup>Thomson Medstat, Washington, DC, USA

**OBJECTIVES:** To estimate resource use and costs associated with a diagnostic workup for suspected breast cancer among female Medicare beneficiaries. **METHODS:** We used Medicare 5% sample claims data to select non-HMO women  $\geq 65$  who had either a suspicious mammogram (Group A) or signs or symptoms of breast cancer (Group B), but no evidence of active treatment of any prior cancer, in the first 3 quarters of 2004. We then measured their resource use and costs associated with a pre-defined set of relevant breast cancer diagnostic services. **RESULTS:** Our sample included 45,978 women (19,769 Group A, 26,209 Group B). On average, women presenting for a breast cancer diagnostic workup received 1.4 diagnostic mammograms, 1.0 pathology services, 0.6 radiology services, and 0.5 other breast imaging studies, among other services. The average cost of a diagnostic workup—whether it eventuated in a breast cancer diagnosis or not—was \$361, and was nearly identical between groups (\$363 Group A vs. \$359 Group B), although breast biopsy was a more important determinant of costs for patients in Group A. We estimate that Medicare spends approximately \$649 million annually on diagnostic workups for women with suspected breast cancer, and that false positive mammograms result in costs of approximately \$250 million. **CONCLUSION:** Resource use and costs of diagnostic workups for women presenting with suspicion of breast cancer are substantial.

EC2

**AN ECONOMIC EVALUATION OF DASATINIB AS A TREATMENT FOR CHRONIC PHASE CHRONIC MYELOID LEUKAEMIA IN SCOTLAND**Taylor MJ<sup>1</sup>, Minda K<sup>2</sup>, Cerri KH<sup>3</sup>, Davis C<sup>4</sup>, Kan HJ<sup>5</sup>, Ray S<sup>6</sup><sup>1</sup>University of York, York, UK, <sup>2</sup>Bristol-Myers Squibb Pharmaceuticals, Uxbridge, UK, <sup>3</sup>Bristol-Myers Squibb International Corporation, Braine l'Alleud, Braine l'Alleud, Belgium, <sup>4</sup>Bristol-Myers Squibb, Wallingford, CT, USA, <sup>5</sup>Bristol Myers Squibb, Wallingford, CT, USA, <sup>6</sup>Bristol-Myers Squibb Pharmaceuticals, Wallingford, CT, USA

**OBJECTIVES:** Chronic myelogenous leukaemia (CML) is a progressive disease newly diagnosed in approximately 50 patients a year in Scotland. It is associated with significant health and economic burden. Dasatinib is a new treatment indicated for patients with CML who failed imatinib therapy. The purpose of this study was to estimate cost-effectiveness of dasatinib vs. imatinib in patients with chronic phase CML resistant to imatinib from the perspective of NHS Scotland. **METHODS:** A Markov model was developed to estimate the lifetime costs and health outcomes associated with dasatinib (140 mg/day) compared to imatinib (800 mg/day) in chronic phase CML patients resistant to imatinib therapy. Patients progress through the disease in monthly cycles based on their initial best response to treatment: no response, complete haematological response, partial or complete cytogenetic response, as observed in a randomised Phase II trial. The rate of progression was based upon estimates from published literature. Utility values used were obtained using the EQ-5D in a CML utility study based on patient's current health status and level of response. Resource use was estimated by expert haematologist and unit costs were taken from national

databases. Costs and outcomes were discounted at 3.5% per annum. One-way and probabilistic sensitivity analyses were conducted to estimate the stability of the results. **RESULTS:** In chronic phase CML, treatment with dasatinib resulted in 0.68 incremental life years, 0.63 incremental QALYs, and savings of £10,579 over the patient's lifetime compared to treatment with imatinib. Treatment with the lower-cost dasatinib reduces overall costs due to fewer patients progressing to the advanced (and costly) stages of CML. The results were stable under a range of sensitivity analyses. **CONCLUSION:** Compared to imatinib, dasatinib is associated with increased effectiveness at a lower cost; dasatinib is a dominant treatment option for patients with chronic phase CML resistant to imatinib.

EC3

**COST-MINIMIZATION ANALYSIS OF CAPECITABINE + OXALIPLATIN (XELOX) VS. INFUSIONAL 5-FU/LV + OXALIPLATIN (FOLFOX-6) AS FIRST-LINE TREATMENT FOR METASTATIC COLORECTAL CANCER (MCRC) IN THE FRENCH SETTING**Perrocheau G<sup>1</sup>, Ducreux M<sup>2</sup>, Hebbar M<sup>3</sup>, Ychou M<sup>4</sup>, Lledo G<sup>5</sup>, Conroy T<sup>6</sup>, Faroux R<sup>7</sup>, Douillard JY<sup>8</sup>, Pacull A<sup>9</sup><sup>1</sup>Centre René Gauducheau, Saint-Herblain, France, <sup>2</sup>Institut Gustave Roussy, Villejuif, France, <sup>3</sup>CHU, Lille, France, <sup>4</sup>Centre Val d'Aurelle, Montpellier, France, <sup>5</sup>Clinique Saint-Jean, Lyon, France, <sup>6</sup>Centre Alexis Vautrin—Centre regional de Lutte contre le Cancer, Vandoeuvre les Nancy, France, <sup>7</sup>Centre Hospitalier Départemental—Les Oudairies, La Roche sur Yon, France, <sup>8</sup>Centre René Gauducheau, Nantes, France, <sup>9</sup>Roche, Neuilly-sur-Seine, France

**OBJECTIVES:** XELOX has been shown to be non inferior to FOLFOX-6 and well tolerated as first-line treatment for MCRC in the phase III trial ML16987. The purpose of this study was to assess, in the French setting, the cost of XELOX and to compare it to that of FOLFOX-6. **METHODS:** A total of 306 patients were randomized to receive either XELOX (n = 156: capecitabine 1000 mg/m<sup>2</sup> bid d1-14, oxaliplatin 130 mg/m<sup>2</sup> d1, q3w) or FOLFOX-6 (n = 150: oxaliplatin 100 mg/m<sup>2</sup> d1 LV 400 mg/m<sup>2</sup> 2 h infusion then 5-FU 400 mg/m<sup>2</sup> i.v. bolus then 2400–3000 mg/m<sup>2</sup> 46 h infusion, q2w) for 6 months in a prospective, randomized, multicenter, phase III study. A cost minimization has been conducted from the French hospital perspective. The cost of hospitalizations for chemotherapy administration were compiled applying official tariffs of the national 'PMSI' database, directly derived from the Diagnosis Related Group (DRG). **RESULTS:** The ITT population comprises 306 patients (156 on XELOX, 150 on FOLFOX-6). Baseline characteristics were well balanced. The number of total hospitalizations, defined as the mean number of times patients are hospitalized for all causes, was 6.5  $\pm$  2.6 and 9.5  $\pm$  4.1 for XELOX and FOLFOX-6, respectively. Patients received an average of 6.1  $\pm$  2.4 cycles of XELOX and 9.2  $\pm$  3.2 cycles of FOLFOX-6. The costs of hospitalization for chemotherapy are available for 282 patients (142 in the XELOX arm and 140 in the FOLFOX-6 arm). The average cost of chemotherapy per cycle was €608  $\pm$  446 per patient in the XELOX arm and €1043  $\pm$  787 per patient in the FOLFOX-6 arm (p < 0.001). The average total cost of chemotherapy (all cycles) per patient was €3309  $\pm$  1963 for XELOX and €8198  $\pm$  6909 for FOLFOX-6. XELOX is cost saving by €4,889 per patients for all cycles performed. **CONCLUSION:** XELOX is cost saving as first-line treatment for MCRC and appears to decrease hospital resource consumption.