AN ECONOMIC, RANDOMIZED, MULTICENTER PHASE III TRIAL OF SECOND LINE TREATMENT FOR NON SMALL CELL LUNG CANCER (NSCLC) COMPARING DOCEXTALEX VERSUS PEMETREXED: GFPC

Paris Abstracts

Health Care System (SUS) perspective. We also studied the value of dasatinib versus nilotinib. METHODS: A cost-utility lifetime Markov model was developed to calculate the incremental cost per Quality-Adjusted Life Year (QALY). Disease progression depended on the best treatment response rates taken from dasatinib clinical trials. Treatment effects on productivity and utilities were estimated from published literature. Costs were obtained according to official prices and standard government discounting procedures. Since nilotinib does not have a published price in Brazil, the lowest international price found on the internet was used. Resource utilization was based on clinical survey. Both costs and effects were discounted annually at 5.0%. The robustness of the results was assessed through deterministic and probabilistic sensitivity analysis. RESULTS: In the base case, lifetime treatment resulted in dominance of dasatinib in CP versus both imatinib >400 mg and nilotinib, and an incremental cost-effectiveness ratio (ICER) of about $2,000/QALY for AP and approximately $15,000/QALY for BP against imatinib. Sensitivity analysis showed pharmaceutical costs as the most important driver of the result. CONCLUSIONS: Compared to imatinib >400 mg and nilotinib, dasatinib is associated with increased QALYs in all phases and lower overall costs in CP. So dasatinib is the dominant strategy for the treatment of chronic phase CML patients who are resistant to imatinib. Since clinical outcomes for imatinib 800 mg for advanced phases are unsatisfactory, dasatinib 140 mg is a reasonable option for imatinib-resistant CML patients in accelerated and blast phases.

DYNAMIC CONTRAST-ENHANCED ULTRASOUND WITH QUANTIFICATION TO ASSESS TARGETED TREATMENT EFFICACY: RESULTS OF A MULTI-CENTRE PROSPECTIVE COST STUDY

 (!_A) 83 vs. 87a, 683 vs. 81a) for the ecoguided cyst exam; the 26.4% with no ecovisible lesion was subjected to a stereotactic VABB. Impact of further exams on the cost of diagnostic process increased the procedural costs by 356% for 2d line NSCLC treatment. The difference decreased according to adverse events and administration costs. Cost-effectiveness and sensitivity analyses will be presented at the meeting.

Lung cancer is the second most common cancer in men and the leading cause of cancer death worldwide. Chemotherapeutic drugs for mNSCLC patients are tested in “optimal patient populations” in order to optimize efficacy and reduce cost. However, the results of these trials are not always generalizable to the whole population, leading to significant economic impact. The aim of this study was to assess the value of chemotherapy regimen and dosing schedule for platinum-sensitive mNSCLC patients in Italy, from the perspective of the Italian National Health Care System (SUS). A Markov model was developed to estimate the long-term QALY impact and associated cost. The study population included both chemotherapy naïve patients and patients with prior chemotherapy. The model estimated the costs and QALYs for the following treatments: platinum-based doublet, cisplatin and gemcitabine, docetaxel and carboplatin, and pemetrexed. Sensitivity analysis was performed to assess the cost-effectiveness of the strategies when the cost of chemotherapy, drug costs and utility values were varied. The study results showed that pemetrexed was the cost-effective strategy for first-line treatment of mNSCLC patients in Italy. The model results are in line with the results of other studies performed in other countries. The findings of this study could be useful for the Italian National Health Care System (SUS) to optimize the use of chemotherapy regimens for mNSCLC patients.

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GROUPE FRANCAIS DE PNEUMO-CANCROLOGIE 05-06 STUDY

Vergnenegros A1, Corre R2, Barbier H3, Tallon D4, Dupin C5, Robinet O6, Crequi J, Bord A7, Thomas P8, Poireau C9

CHU Limoges, Limoges, France, 1CHU Pitié Salpêtrière, Paris, France, 2Hôpital de l’Ermitage, Niort, France, 3CHU de Bordeaux, Bordeaux, France, 4Hôpital de Toulouse, Toulouse, France, 5Hôpital de Rennes, Rennes, France, 6Hôpital d’Instruction des Armées Sainte-Anne, Toulon, France, 7CHU de Strasbourg, Strasbourg, France, 8CHU de Grenoble, Grenoble, France, 9Centre Hospitalier Intercommunal des Alpes du Sud, GAP, France, 10Hôpital Saint antoine, APHP, Paris, France

OBJECTIVES: The cost of second line treatment for non small cell lung cancer (NSCLC) has dramatically increased during the last decade. The objective of this phase III, randomized, multicenter study was to compare from the payer’s perspective the economical impact of two widely used treatments: pemetrexed versus docetaxel.

METHODS: This study included progressive NSCLC: docetaxel 75 mg/m2 (arm A) versus pemetrexed 500 mg/m2 (arm B) every three weeks. The number of subjects was determined to a second line direct cost difference of 10% between the two arms (n = 0.05, β = 0.20). The analysis recorded: treatment, drug administration, productivity at home or inpatient and adverse events costs. Average and 95% confidence interval costs, differences were calculated by non parametric methods (bootstrap, SAS software).

RESULTS: 150 patients were enrolled between February 2006 and June 2008. There were no differences between the two arms in terms of age, sex, performance status, weight loss, body surface, history. TTP was 2.8 months [2.2–4.4] for arm A and 3.3 months [2.6–4.0] for arm B (p = 0.85). The mean number of cycles was 3.7 (± 1.9) for arm A and 3.6 (± 1.75) for arm B. There were no differences for overall toxicities (p = 0.15), grade 3–4 toxicities or grade 2–3 toxicities. In the opposite, there was a significant difference in term of overall grade 3–4 toxicities: 39/57 for arm A (52%) versus 25/75 (33%) for arm B (p = 0.02). In terms of chemotherapy costs, arm B was more costly: €773,082.76 versus €513,700.42 (+51%). In terms of global costs, the difference was due to the higher TTP of arm B.

CONCLUSIONS: Chemotherapy with pemetrexed is more cost-effective for 2d line NSCLC treatment. The difference decreased according to adverse events and administration costs. Cost-effectiveness and sensitivity analyses will be presented at the meeting.