for BIM, and 203 for TRAV. The mean drug cost (AWP) was estimated from actual claims as LAT, $301 (95% CI: $293-$309); BIM, $364 (95% CI: $344-$384); TRAV, $278 (95% CI: $263-$294). Compared to TRAV, incremental cost effectiveness ratio of LAT was $0.56 and of BIM was $3.91 per additional day of uninterrupted therapy. CONCLUSION: Patients do not remain on ocular prostaglandins longer than six to seven months before therapy interruption/discontinuation. Patients using LAT stayed on therapy longer than those using BIM or TRAV and at a lower cost per additional day of therapy than BIM.

A COST-EFFECTIVENESS ANALYSIS OF TNF-ALPHA INHIBITORS IN COMPARISON TO OTHER STRATEGIES IN THE TREATMENT OF MODERATE-TO-SEVERE PSORIASIS: A DECISION ANALYSIS MODEL

Viswanathan S, McGhan WF

University of the Sciences in Philadelphia, Philadelphia, PA, USA

OBJECTIVE: In comparison to traditional treatment options, TNF-α inhibitors have shown promise in increasing the clearance of psoriatic lesions and improving the quality-of-life of patients with moderate-to-severe psoriasis. They are however associated with higher costs and side-effects. The study objective was to compare the cost-effectiveness of TNF-α inhibitors to other psoriasis treatment strategies. METHODS: The cost-effectiveness of ten treatment options from three drug classes- TNF-α inhibitors, systemic therapies and phototherapy- were evaluated using a decision analysis model constructed using DATA Treeage. The probabilities of success were obtained from PASI-75 scores from published clinical trials. The annual drug costs were obtained from the Drug Topics Red Book and published clinical trials. Additional costs associated with treatment, which included annual pharmacy costs and costs for professional and institutional services, were obtained from published reports. Incremental cost effectiveness ratios (ICERs) were calculated for additional cost divided by incremental PASI-75 values, and were estimated relative to the drug with the lowest cost. Multiple sensitivity analyses were performed to determine the robustness of the findings. RESULTS: Phototherapy was found to be the most cost-effective treatment option with an ICER of $16,435.89/PASI-75, relative to systemic therapy. The most cost-effective TNF-α inhibitor was infliximab, with an ICER of $15,733/PASI-75, relative to adalimumab. Infliximab had the highest drug acquisition cost ($21,250) among the 10 treatment strategies. While Goekerman therapy with a PASI-75 score of 100 had the highest clinical effectiveness among all the treatment strategies examined, the more effective TNF-α inhibitor was infliximab, with a PASI-75 score of 82.3. Sensitivity analysis indicated that the results were affected by the model assumptions. CONCLUSION: Thus, phototherapy was found to be the more cost-effective treatment option in this analysis. It is expected that the cost of TNF-α inhibitors will be lower in the future.

A COST-EFFECTIVENESS ANALYSIS OF BRIMONIDINE/TIMOLOL

Higginbotham E1, Stern L2, Walt J2

1Morehouse School of Medicine, Atlanta, GA, USA; 2Analytica International, New York, NY, USA, 3Allergan Inc, Irvine, CA, USA

OBJECTIVE: To determine the incremental cost-effectiveness of brimonidine/timolol versus dorzolamide/timolol for lowering intraocular pressure (IOP). METHODS: A cost-effectiveness analysis was performed using clinical data from 2 investigator-masked, randomized, 3-month, parallel-comparison studies performed at 10 sites. In a post-hoc analysis of those patients receiving monotherapy treatment for IOP lowering (either brimonidine/timolol or dorzolamide/timolol) for three months, the proportion of patients at various IOP levels were calculated and statistically compared. A 3-month supply of each drug was calculated based on their respective WAC price and bottle size (5 ML brimonidine/timolol and 10 ML dorzolamide/timolol). The incremental cost-effectiveness ratio (ICER) was calculated as the difference in drug cost divided by the difference in the percentage of patients meeting the IOP threshold at three months between brimonidine/timolol and dorzolamide/timolol. RESULTS: A 3-month supply of brimonidine/timolol and dorzolamide/timolol were $169.83 and $154.40, respectively yielding a cost difference of $15.44. The proportion of patients at lower IOP thresholds was consistently higher with brimonidine/timolol compared to dorzolamide/timolol resulting in a statistically significant incremental benefit for the thresholds from less than 17mmHg to less than 12mmHg. The associated ICERs for those thresholds range from $55.12-$85.75 per the percentage of patients reaching the IOP threshold. CONCLUSION: We calculated brimonidine/timolol to be more cost-effective than dorzolamide/timolol. Given the importance of achieving target IOP, both cost and effectiveness should be considered when evaluating combination therapies for glaucoma.