COMPARATIVE COST-EFFECTIVENESS ANALYSIS OF DARUNAVIR FOR FIRST-LINE TREATMENT OF HIV INFECTION IN THE UNITED STATES

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OBJECTIVES: To assess the cost-effectiveness of Truvada versus Combivir and Kivexa in the treatment of antiretroviral naive HIV-I infected patients in Mexico. METHODS: A Markov model was developed to assess the incremental cost-effectiveness of Truvada vs Combivir and Kivexa. Clinical data were derived from published clinical trials (Study 903 and CNA10024) and other secondary sources to create a model of disease progression and treatment patterns. Both health care and treatment costs were considered. The analysis was performed from the Mexican Health Care System perspective; costs were reported in 2008 US dollars. Costs and health outcomes were discounted at 5%. A second-order probabilistic Monte Carlo sensitivity analysis was conducted to assess the effects of parameter uncertainty on the study findings. RESULTS: The model projects an accumulated discounted cost to the Mexican health care system per patient receiving the Truvada regimen of US$23,776 compared to US$24,095 for the Kivexa regimen and US$22,999 for the Combivir regimen. The accumulated discounted cost is 3.85 QALYs per patient receiving Truvada compared to 4.89 QALYs for Kivexa and 4.81 QALYs for Combivir. This results in an incremental cost for Truvada and Kivexa vs. Combivir of US$5,805 per QALY and US$9,436 per QALY respectively. Considering a willingness to pay (WTP) threshold of US$10,000 per QALY there is a 90% probability that treatment with Truvada is cost-effective relative to Combivir. CONCLUSIONS: Results from these analyses suggest that in the Mexican setting, use of Truvada instead of standard Combivir is a cost-effective treatment for HIV-I patients in Mexico to be cost effective. These conclusions are supported by conservative assumptions and sensitivity analyses.

THE COST-EFFECTIVENESS OF TRUVADA, KIVEXA AND COMBIVIR IN THE TREATMENT OF ANTIRETROVIRAL NAIVE HIV-I INFECTED PATIENTS IN MEXICO

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