

PIN27

PROSPECTIVE OBSERVATIONAL STUDY OF PATIENT REPORTED OUTCOMES FOR AZITHROMYCIN VS. USUAL CARE IN THE TREATMENT OF ACUTE BACTERIAL EXACERBATIONS OF CHRONIC BRONCHITIS

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OBJECTIVE: A three-day azithromycin course (500 mg/day) was recently introduced in the US. Our study evaluated patient-reported outcomes and resource utilization following a three-day azithromycin course in the treatment of acute exacerbations of chronic bronchitis (AECB). **METHODS:** This prospective, multicenter study evaluated outpatients with AECB who received either three-day azithromycin (AZM) or 5–14 day courses of other antibiotics (usual care group; UCG) as directed by the physician. A total of 128 patients (57 AZM, 71 UCG) completed two health-related quality of life instruments, the St. George's Respiratory Questionnaire (SGRQ) and Short Form 36 (SF-36), at baseline, day 14, and end of study (days 24–28), and a diary for the first 14 days after start of antibiotic therapy. **RESULTS:** The only difference between treatment groups was a higher percentage of diabetics in the UCG compared with the AZM (17% vs. 2%; $P = 0.02$). Both groups reported similar improvement in signs and symptoms, absenteeism, concomitant respiratory medication use, resource utilization, compliance, and treatment satisfaction as reported in the 14-day diary. AZM had significant improvement in all SGRQ measures and in the SF-36 mental and physical summary components over the course of the study ($P < 0.01$). The UCG reported significant improvement in all SGRQ measures and in the SF-36 physical component ($P < 0.01$), but not in the SF-36 mental component scores ($P = 0.10$). In total, 78% AZM and 56% UCG had a > four-point improvement on the SGRQ total score at EOS; however, this difference was not statistically significant in multivariate analysis ($P = 0.06$). A significantly greater activity scale improvement was found for the AZM group compared with the UCG ($P = 0.008$). **CONCLUSIONS:** The three-day course of azithromycin 500 mg/day had significant impact on patient reported outcomes, as measured by the SGRQ, SF-36, and patient diary. Further, this regimen produced a greater improvement on the SGRQ activity scale compared with UCG.

INFECTION—HIV

PIN28

THE COST-EFFECTIVENESS OF PREVENTING MOTHER-TO-CHILD TRANSMISSION OF HIV IN CHINA

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OBJECTIVES: Several interventions for reducing mother-to-child transmission of HIV (MTCT) have been implemented internationally. In some cities in China, HIV testing is required for all pregnant women and funding for MTCT prevention is paid by the government. However, a standard practice has not been determined. We evaluate the cost-effectiveness of five interventions for preventing MTCT of HIV in China. **METHODS:** We developed a decision analytic model to compare the costs, health benefits and cost-effectiveness of the five alternatives. We evaluated avoiding breastfeeding only, single-dose nevirapine, short-course zidovudine, long-course zidovudine, or long-course HAART. In the base case, we considered national program implementation in which approximately 15,000,000 women would receive HIV tests annually. We constructed additional scenarios to investigate regional differences in HIV prevalence

cohort size. All costs were expressed in 2003 USD. **RESULTS:** HAART is the most cost-effective of the five interventions if implemented nation-wide. If HAART was offered to all women following a positive HIV test result, it would prevent 1,890 new infections annually and lead to a gain of 39,900 life years (LY). The total cost is \$209,000,000, or \$5,200/LY gained. HAART becomes more cost-effective as the baseline prevalence increases. In extensive sensitivity analysis, HAART remained the most cost-effective intervention. If avoiding breastfeeding is already the status quo, then single-dose nevirapine is the most cost-effective alternative and is cost saving. **CONCLUSIONS:** We are not aware of a cost-effectiveness threshold that is appropriate for China. However, HAART is the most cost-effective alternative in a number of different scenarios. In spite of being the most cost-effective option, the total drug cost of implementing HAART nationally may necessitate consideration of other alternatives.

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COST OF THERAPY FOR ARV NAIVE HIV-INFECTED PATIENTS: FOSAMPRENAVIR / RITONAVIR VERSUS NELFINAVIR

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The recent SOLO clinical trial demonstrated that the efficacy at 48 weeks of HAART regimens containing fosamprenavir/ritonavir vs. nelfinavir in treatment-naïve patients was similar. However, relative cost comparisons of the two regimens have not been evaluated in light of the 400% price increase of ritonavir. **OBJECTIVES:** A cost comparison analysis was conducted of HAART regimens fosamprenavir/ritonavir vs. nelfinavir. **METHODS:** Clinical efficacy and dosing parameters were extracted from the SOLO trial and package inserts. Although recommendations dictate twice daily dosing regimens for protease inhibitors, the baseline assumption for treatment-naïve patients was the recommended 1400/200 mg once daily dosing regimen. The efficacy of nelfinavir 250 mg and 650 mg was assumed to be identical. Sensitivity analysis was conducted on cost of therapy and cost savings for different scenarios of average wholesale price (AWP), discounts from the AWP, and number of tablets per day. Daily, monthly, and 48-week costs of nelfinavir versus ritonavir-boosted fosamprenavir were compared. **RESULTS:** Due to the price change in ritonavir, the drug acquisition cost per day of fosamprenavir boosted with ritonavir increased 73% from \$23.48 to \$40.71. The nelfinavir 625 mg twice daily dosing regimen resulted in monthly cost savings of \$502 and a 48-week cost-reduction of \$5545 (41%) compared to fosamprenavir/ritonavir 1400/200 mg once daily regimen. A discount of approximately 75% on the ritonavir AWP would make the drug acquisition cost of fosamprenavir boosted with ritonavir equal to that of nelfinavir. **CONCLUSION:** The price increase of ritonavir significantly affects drug acquisition cost for patients taking fosamprenavir and other boosted protease inhibitors. Without compromising clinical efficacy, nelfinavir provides a cost-saving alternative for treatment-naïve HIV-infected patients compared to ritonavir-boosted fosamprenavir.

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ANEMIA IN HIV/AIDS PATIENTS IN THE HAART ERA: CLINICAL AND HUMANISTIC IMPACT

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