Abstracts

A119

NEW ANTIFUNGAL MEDICATION IMPACT ON MARKET SHARE AND UTILIZATION OF TRADITIONAL AGENTS IN A SINGLE HEALTH CARE SYSTEM Cavanaugh TM, Fattal V, Binder R
Comenius University, Bratislava, Slovak Republic OBJECTIVES: The aim of this study was to collect comparable and reliable data on the antifungal therapy in Slovakia during the period 1998 – 2007. Special interest was paid to trends in antifungal therapies and the relationship between the costs and resistance was also studied. METHODS: Data of wholesalers (following ATC/DDD), who are legally obliged provide this information to the Slovak Institute for Drug Control, was used for the analysis. RESULTS: The collected data showed a significant increase in antibiotic consumption from 1998 to 2003. The cost was significantly decreased (6%–12%); in 2003 (3.070) and in 2007 (3.364). We can see a noticeable increase in consumption of macrolides (DDI); in 1999 (2.976), in 2003 (3.683) and in 2007 (6.144) and a moderate increase in fluoroquinolones consumption – in 1998 (1.052), in 2003 (1.602) and in 2007 (2.319). A significant decrease in first-generation cephalosporins consumption – in 1998 (1.052), in 2003 (0.662) and in 2007 (0.370), and a notable increase in consumption of second-generation cephalosporins – in 1998 (1.200), in 2003 (1.638) and in 2007 (3.241) and third-generation cephalosporins in 1998 (0.152), in 2003 (0.118) and in 2007 (0.068) can be seen. The results show that consumption of combinations of penicillins including beta-lactamase has increased – in 1998 (2.977), in 2003 (4.645) and in 2007 (5.778), but consumption of beta-lactamase sensitive penicillins has decreased – in 1998 (4.171), in 2003 (3.469) and in 2007 (3.243) in term of DDD. From this study, the stable antibiotics consumption in financial term – in 1998 (#94,141,000), in 2003 (#59,078,000) and in 2007 (#54,680,000) can be seen. CONCLUSIONS: Adherence to principles of antibiotic policy lead to fundamental short and long term financial savings within health care systems.

PINS4
INCREASING CHC TREATMENT RATE IN US IS A COST SAVING STRATEGY Vining EK, Mehra M, Dibello J
Johnson & Johnson Pharmaceutical Services LLC, Raritan, NJ, USA OBJECTIVES: The low treatment rates in chronic hepatitis C (CHC) is partially due to suboptimal SVR achieved with the current pegylated-interferon/ribavirin (P/R) therapy. Here we applied a compartment model to assess the potential impacts of a higher CHC treatment rates in the US. METHODS: This mathematical model was expanded by partial differential equations to incorporate several factors: injection-drug-use status, CHC status (infection, diagnosis, genotyping, treatment, and SVR), and disease-progression status. Model inputs were based on published sources. Model was calibrated from 2002–2006 and matched closely with CDC reports and other published literature. The model was applied to assess impacts of a higher CHC treatment rate from 2007-2040. Key assumptions included: only the current P/R treatment is available during 2007–2040; P/R durations consistent with current treatment guidelines by genotypes and costs and $28,000/48-week. All costs were converted into 2007 dollars using 3% discount rate. RESULTS: When P/R treatment rate increased from the current 6% to 30% across all patient groups between 2007–2040, a total of 431,000 more patients could be treated, leading to 236,716 more patients being cured, and resulting in 111,802 fewer CHC incidences, 110,543 fewer ALD incidences, and 160,679 fewer deaths. Cost increases with higher treatment rate strategy come from more treatments ($12.4 billion) and managing more P/R treatment failure patients ($9.4 billion). Cost savings mainly come from having fewer diagnosed but not treated CHC patients to manage ($20.5 billion) and having fewer patients with advanced liver disease (ALD) to manage ($6.1 billion). Overall savings of all baseline savings are projected at $4.8 billion compared to the base scenario of 6% treatment rate. CONCLUSIONS: Increasing P/R treatment rate could result in more patients being cured earlier, preventing CHC and ALD incidences and saving lives. Our model projects increasing treatment rates could be a cost saving strategy.