CONCLUSIONS: Quadrivalent seasonal influenza vaccines, at price parity with trivalent vaccines, appear to be highly cost-saving from the third-party payer and the societal perspectives.

PIN63 A COST-EFFECTIVENESS ANALYSIS OF TWO PATIENT-LEVEL REMINDER INTERVENTIONS IN THE TREATMENT OF SOBOSOMAL PNEUMONIA CAUSED BY MECITHICILLIN-RESISTANT ASPEROCCUS AUREUS (MRSA) BASED ON A PHASE 4 CLINICAL TRIAL

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OBJECTIVES: To determine the incremental cost-effectiveness of linezolid versus vancomycin using data from a clinical trial assessing treatment of nosocomial pneumonia due to MRSA in hospitalized adults. METHODS: A cost-effectiveness analysis from the U.S. hospital-payer perspective was piggybacked onto a phase 4, randomized, double-blind, placebo-controlled, parallel-group clinical trial (Cornely et al., NEJM 2007). IFI treatment costs were inflation-adjusted over last 6 years (2007-2012) and drug costs were based on 2012 IMS data. RESULTS: Trial data estimates the probability of an IFI over 100 days of follow-up on whether to be lower than FLU/ITRA by 0.05 to 0.11. The duration of treatment for patients was 49.29 days with $10,522 (2012 USD) incremental costs of prophylaxis with FLU /ITRA and posaconazole is $5,293 and $5,859 respectively. The incremental cost-effectiveness ratios (ICER) for Posaconazole versus FLU/ITRA are estimated to be $8,805 per IFI avoided and $8,439 per life-year saved. CONCLUSIONS: Posaconazole is cost-effective to FLU or ITRA in the prevention of IFIs among neutropenic patients with AML and MDS in the current U.S. health care setting.

PIN66 POTENTIAL EPIDEMIOLOGICAL AND ECONOMIC IMPACT OF DIFFERENT ROTAVIRUS VACCINES IN LOW AND MIDDLE INCOME COUNTRIES

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OBJECTIVES: Several studies have shown rotavirus vaccine is cost effective in low and middle income countries. Despite this, competing choices of rotavirus vaccines may make the selection of either vaccine difficult for health decision-makers in low and middle income settings. The objective of this research is to evaluate the cost-effectiveness of the monovalent (MNV) and pentavalent (PTV) rotavirus vaccines on children mortality in 116 low and middle income countries that represent 95% of the world population. METHODS: A decision economic model was built to estimate the effect of MNV or PTV vaccination. Input sources were gathered from international databases, previous research and a systematic review of MNV and PTV vaccine effectiveness. Outcomes were reported in terms of cost per disability-adjusted life-year (DALY) averted, comparing no vaccination being implemented on selected countries for the year 2010 with either MNV or PTV introduction. Costs were expressed in 2010 international dollars. RESULTS: Low and middle income countries would have had 601,511 more deaths if rotavirus vaccine would not have been used. Under no vaccine scenario, 139 DALYS per 1000 children, 1.57 million inpatient and 9.17 million outpatient cases would occur every year. MNV would aver 53.3% of rotavirus related deaths, and PTV 57.9%. MNV and PTV were highly cost effective worldwide, according to WHO criteria (less than per capita gross domestic product) $143 cost per DALY for MNV versus $152 cost per DALY for PTV. Vaccination uptake was lower in low income countries. CONCLUSIONS: Rotavirus vaccine is cost-effective in all analyzed countries. Despite cost effectiveness analysis is a useful tool for decision making in middle income countries, for low income countries health-decision makers should also assess the impact of introducing either vaccine on local resources, and budget impact analysis of vaccination.

PIN67 COST-EFFECTIVENESS EVALUATION OF AMPHOTERICIN B, AMPHOTERICIN B LIPOSOMAL, CASPOFUNGIN AND VORICONAZOL IN TREATING ASPERGILLOSIS UNDER THE BRAZILIAN PRIVATE HEALTH CARE SYSTEM PERSPECTIVE

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OBJECTIVES: Aspergillosis is the second cause of invasive fungal infections with high mortality rates. The objective of this research is to evaluate the cost-effectiveness of amphotericin B (AB) 1.5mg/kg/day, amphotericin B liposomal (AL) 5mg/kg/day, caspofungin (CA) 50mg/day, voriconazol 8mg/kg/day (VO) including maintenance oral Voriconazol 400mg/day scheme in the treatment of aspergillosis under the Brazilian private health care system perspective. METHODS: A decision tree model was built considering sequential treatments, from which patients could respond to one initial treatment and continue to maintain phase of the same medication, or do not respond due to early mortality/radiation adverse events. All treatments were compared in direct costs, and effectiveness using bootstraping was conducted to estimates confidence intervals (CI) for costs, efficacy, and incremental cost-effectiveness ratios (ICER). One-way sensitivity analyses were conducted to evaluate the uncertainty and cost drivers. RESULTS: Data from 391 patients (186 linezolid, 205 vancomycin) were analyzed. A greater proportion of linezolid patients achieved treatment success versus vancomycin patients (mean [95% CI]): 55% (48.3%-61.9%) versus 45% (38%-52.3%). Total costs per linezolid patient were $48,929 ($45,375-$52,483) compared to $46,683 ($43,201-$50,128) per vancomycin patient. The point estimate for the ICER of linezolid versus vancomycin is $2,246 per life-year saved.

PIN65 COST-EFFECTIVENESS OF POSACONAZOLE VERSUS FLUCONAZOLE OR ITRAZOCINAZOLE IN THE PREVENTION OF INVASIVE FUNGAL INFECTIONS AMONG NEUTROPENIC PATIENTS IN THE UNITED STATES

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OBJECTIVES: Posaconazole has shown superior clinical efficacy than Fluconazole/Itraconazole (FLU/ITRA) in the prevention of invasive fungal infections (IFIs) among patients with neutropenia resulting from chemotherapy for acute myelogenous leukemia (AML) or the myelodysplastic syndrome (MDS)

Previous study has shown that Posaconazole is cost-effective versus FLU/ITRA in the 2007 U.S. health care setting. To reflect the changes in health care cost and the changes in drug prices, the study aims to provide an update on the cost-effectiveness of Posaconazole in the current U.S. health care setting. METHODS: A previously published (O’Sullivan et al., VIH 2009) cost-effectiveness model was used to assess the cost-effectiveness of Posaconazole versus FLU/ITRA in the prevention of IFIs among neutropenic patients with either MNV or PTV vaccination. Data estimates the effect of Posaconazole versus FLU/ITRA are estimated to be $8,805 per IFI avoided and $8,439 per life-year saved. CONCLUSIONS: Posaconazole is cost-effective to FLU or ITRA in the prevention of IFIs among neutropenic patients with AML and MDS in the current U.S. health care setting.