

for RT intervention and US\$ 17.88/DALY for RPR intervention. Cost-effectiveness ratios (CERs) were more sensitive to the prevalence rate, sensitivity of tests, and DALY discount rate. **CONCLUSIONS:** Using the on-site antenatal rapid testing, same day treatment for positive results, and confirmed by RPR testing approach is cost-effective in Mongolia.

PIH32

COST EFFECTIVENESS OF CALCIUM SUPPLEMENT IN REDUCING PREECLAMPSIA-RELATED MATERNAL MORTALITY

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OBJECTIVES: To estimate the cost-effectiveness of the supply of calcium of 1200mg per day from the week 14 of pregnancy to all pregnant women compared to not supplying it to reduce the incidence of preeclampsia. **METHODS:** A decision tree was built in TreeAge® with outcome measured in life years gained (LYG) associated to the reduction in maternal deaths. The costs were included from the perspective of the Health System in Colombia. Pharmaceutical costs were obtained from 2008 SISMED (1) and the value of the procedures was calculated by adjusting the values of Tariff Manual ISS 2001 + 30% (2), these values were compared with information of costs supplied by three EPS. All costs are expressed in Colombian pesos of 2010. The discount rate was 0%. It was performed sensitivity univariate and probabilistic analyzes for costs and effectiveness. **RESULTS:** Compared to no intervention, calcium supplement is a dominant alternative. If the incidence of preeclampsia is lower than 51.7 per 1000 pregnant women or the cost per tablet of calcium of 600 mg is greater than \$454, calcium supplement is no longer a cost-effective alternative in Colombia for a threshold of 3 times the GDP per capita in Colombia of 2010 by LYG, equal to \$36,143,550. **CONCLUSIONS:** Supply of calcium to all pregnant women from week 14 of gestation is a dominant alternative compared to no intervention, which saves 200 LYG, while it decreases costs in the order of \$5,304 million pesos per 100,000 pregnant women.

PIH33

ECONOMIC EVALUATION OF ULIPRISTAL ACETATE FOR THE TREATMENT OF PATIENTS WITH MODERATE AND SEVERE SYMPTOMS OF UTERINE FIBROIDS IN ROMANIA

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OBJECTIVES: Ulipristal acetate is a selective progesterone receptor modulator that has been demonstrated to be an effective 3-month pre-operative treatment for moderate to severe symptoms of uterine fibroids in adult women of reproductive age. The aim of this analysis was to assess the cost-effectiveness of 5 mg ulipristal acetate as an add-on therapy to standard pre-surgical observation and treatment or immediate hysterectomy in Romania. **METHODS:** A Markov model was developed using a 10-year time horizon. Ulipristal acetate was compared with pre-surgical observation and immediate hysterectomy. The model comprised the following mutually exclusive health states: mild, moderate, severe, or persistent severe excessive bleeding disorder; myomectomy; post-myomectomy with mildly to moderately excessive bleeding disorder; post-myomectomy with severely excessive bleeding disorder; hysterectomy; post-hysterectomy; post-menopause; and death. Transition probabilities and utility values were obtained from clinical trials and the scientific literature. Resource utilisation and unit costs were derived from the consensus panel of clinical experts and the Romanian National Insurance House tariffs. Cost vectors in RON were converted to EUR by using 2013 Romanian National Bank average exchange rate (1 EUR = 4.419 RON). **RESULTS:** Adding a 3-month course of ulipristal acetate to pre-operative observation was predicted to achieve an additional 0.021 quality-adjusted life years (QALYs) at an estimated incremental cost of 367 €, which would result in an incremental cost of 17,749 €/QALY. When 3 months of ulipristal acetate therapy was compared with immediate hysterectomy, the incremental cost-effectiveness ratio was reduced to 2,300 €/QALY. The results were most sensitive to the utility value of the post-hysterectomy health state but responsive to changes in other model parameters. **CONCLUSIONS:** The results of this analysis suggest that adding ulipristal acetate treatment to standard pre-surgical therapy represents a good value for money in Romania. The inclusion of societal benefits may considerably reduce the cost-effectiveness ratio.

PIH34

THE COST-EFFECTIVENESS OF EMERGENCY HORMONAL CONTRACEPTION WITH ULIPRISTAL ACETATE VERSUS LEVONORGESTREL FOR MINORS IN FRANCE

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OBJECTIVES: To compare the cost and effectiveness of two emergency contraceptive methods in minors in France and to support the payer's analysis if it is worth to deliver ulipristal acetate for free to minors. **METHODS:** Based on a decision-analytical model, the cost-effectiveness of two emergency contraceptive methods is compared. Pregnancy rates, outcome of unintended pregnancy in minors and resource utilization are derived from literature. Resources and their costs are considered until termination or a few days after delivery. Costs are taken from a collective perspective. Sensitivity analyses are performed on the most sensitive input parameters. **RESULTS:** Using emergency contraception is superior to no method. The cost of an unintended pregnancy in a French minor is estimated to be 1630€ (1330€ - 1803€). Almost 4 million€ (3.1-13.7million€) could have been saved by using ulipristal acetate instead of levonorgestrel in 2010. The incremental cost of avoid-

ing an additional unintended pregnancy with ulipristal acetate as compared to levonorgestrel is estimated to be 418€. Ulipristal acetate is most cost-effective in the subgroup of intake within 24 hours, where it is more efficacious at a lower cost compared to levonorgestrel. **CONCLUSIONS:** Ulipristal acetate is a cost-effective alternative to levonorgestrel, given that the cost of avoiding an additional pregnancy with ulipristal acetate is less than the average cost of said pregnancies. Therefore, French minors should have free access to ulipristal acetate directly in a pharmacy. Ulipristal acetate should be used rapidly after unprotected intercourse (within 24hours) to benefit from its cost-saving potential compared to levonorgestrel use.

PIH35

CERVICAL ASSESSMENT WITH PROGESTERONE IN THE PREVENTION OF PRETERM BIRTH: A STRATEGY BASED ON COST-EFFECTIVENESS

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INTRODUCTION: Preterm birth (PTB) complications are estimated to be the second most common cause of death in under-five children and responsible for 3.1million neonatal deaths. According to a worldwide analysis, Brazil is one of the top ten countries with the highest number of PTB. Considering its long-term costs, strategies that reduce incidence may be cost-effective. Treatment with progesterone is one of the interventions recommended for PTB prevention due to the evidence supporting its efficacy in women with short cervix and prior history of preterm delivery. **OBJECTIVES:** Determine whether treatment with progesterone for pregnant women with a short cervical length <25mm identified in routine measurement of second-trimester transvaginal cervical length by ultrasound in low-risk singleton pregnancies is a cost-effective strategy under the Brazilian Healthcare System perspective. **METHODS:** A cohort model was developed according to the disease and resources use. Epidemiology of pregnancies at risk of PTB eligible for progesterone treatment were obtained from published data. To obtain national clinical data, births were categorized by gestational week age at delivery specialist opinion. Progesterone effectiveness data were obtained from systematic reviews, meta-analysis and specialist opinion. Costs included screening test, prenatal consultation, progesterone and neonatal hospitalization. Exchange rate was 1USD=2.30BRL. Results were presented in cost/PTB avoided. **RESULTS:** Considering 278,100 PTB, the inclusion of screening test to identify pregnant women with short cervix and its prophylaxis with progesterone shows significant economic savings of USD74 million. Although the expenditure on drug, screening test and prenatal consultation increment the total costs, the reduced number of PTB (263,052 vs 278,100) and neonatal UTI hospitalization length (4,098,543 days vs 4,518,056 days) resulted in a total economic saving. **CONCLUSIONS:** Prevention of PTB is dominant in women with short cervix as compared to a no-prophylactic strategy scenario resulting in economic savings to the Brazilian health care system.

PIH36

COST-EFFECTIVENESS OF PALIVIZUMAB USE IN HIGH RISK CHILDREN FROM BRAZILIAN HEALTH SYSTEM PERSPECTIVE

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OBJECTIVES: This study aimed to investigate the cost-effectiveness of palivizumab to different combinations of risk groups, such as premature children born with gestational age (GA) ≤ 28 weeks, GA ≤ 32 weeks, children with congenital heart disease and bronchopulmonary dysplasia. **METHODS:** Literature review was performed to search effectiveness data. One Markov model (base case), and one decision tree (alternative scenario) were built with a cohort simulation along a 18 years-time horizon for the base case and a 1 year time horizon for the decision tree. Base case consider sequelae after infection, and alternative scenario not. The Health System perspective was used, with a discount rate of 5%. A probabilistic sensitivity analysis (Monte Carlo simulation) with probability distributions fitted to the variables, was performed under the different structural assumptions, as well as a deterministic analysis, using Tornado diagram, to verify the variable modifications able to alter the responses of the model. A threshold analysis was used to estimate the price that palivizumab would fit under an acceptability threshold proposed for the health system. **RESULTS:** The option of using the prophylaxis just in preterm children born with GA ≤ 32 weeks dominated all others. The incremental effectiveness of base case analysis compared with no prophylaxis (base line) was 0.19 QALY. However, this strategy was not cost-effective, presenting an incremental cost-effectiveness ratio (ICER) of R\$ 81,627.31/QALY, value above of World Health Organization (WHO) proposed threshold of three times GDP per capita (R\$ 63,756.00/QALY). The ICER of GA ≤ 32 weeks in alternative scenario was 2.023.045,72, showing the importance of considering sequelae in analysis. Sensitivity analysis showed that some variables when altered were able to change model final answers. **CONCLUSIONS:** Threshold analyses demonstrated that palivizumab price must be reduced in at least 22% to be incorporated to all populations use, based on WHO threshold.

PIH37

COST-EFFECTIVENESS ANALYSIS OF THE NEW BIOMARKERS FOR DIAGNOSIS OF ACUTE KIDNEY INJURY IN CHILDREN AFTER CARDIAC SURGERY

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OBJECTIVES: Children undergoing cardiac surgery for congenital heart disease are more likely to experience development of acute kidney injury (AKI) in the immediate postoperative period. In current clinical practice, AKI diagnosis is based on a rise in serum creatinine (sCr) levels, which occurs 2-3 days after the initiating renal insult. Many new biomarkers offer promise for earlier AKI diagnosis. The objective