AN ECONOMIC EVALUATION OF DROSPIRENONE 2 MG / ESTRADIOL 1.033 MG VERSUS TIBOLONE 2.5MG IN THE TREATMENT OF POSTMENOPAUSAL WOMEN WITH GRADE 1 OR 2 HYPERTENSION IN KOREA

Jung S1, Watson PR2, Asakui Y2, Jeong M1
1Bayer Korea, Seoul, South Korea; 2IMS Health, London, UK

OBJECTIVES: The purpose of this study was to assess the cost-effectiveness of drospirenone 2 mg estradiol 1.033 mg (DROSP/E2) versus tibolone 2.5 mg in the treatment of postmenopausal women with Grade 1 or 2 hypertension in Korea. METHODS: A lifetime Markov model was developed for a population of postmenopausal women indicated for hormone replacement therapy (HRT) who had Grade 1 or 2 hypertension. The model was conceptualized around two years of HRT and progressed through the patients according to their BP status and added on AHT medication as required. Patients experienced MI or stroke as determined by their BP status, which is a major risk factor for CVD. Continuation rates for HRT and antihypertensive therapy (AHT), CVD risk utilities were obtained from published articles. Unit cost, resource use and treatment practice for AHT were based on physician interviews. Only direct medical costs were included. A discount rate of 5% was used for both costs and outcomes according to HIRA guidelines. The model reported effectiveness outcomes in quality-adjusted life years (QALYs) with a subjective premium price for DROSP/E2 over tibolone. RESULTS: DROSP/E2 was cost-effective compared to tibolone. The base case had an incremental cost-effectiveness ratio (ICER) of 11,105,517 KRW per QALY gained. Probabilistic sensitivity analysis showed 80.4% probability the ICER would fall below the threshold of 20 million KRW, BP lowering qualities of DROSP/E2 provide additional benefits of decreasing BP medication and decreased risk of myocardial infarction (MI) and stroke for postmenopausal women with Grade 1 or 2 hypertension. CONCLUSIONS: In Korea, DROSP/E2 proved cost-effective compared to tibolone offering additional benefit of aiding BP control compared to standard HRT.

ECONOMIC EVALUATION OF TWO ALTERNATIVE TREATMENTS FOR OVARIAN STIMULATION IN ASSISTED REPRODUCTION

Navarro Espigares J1, Hernandez Torres E1, Castilla Alcalá JA1, Padial Ortiz MA1, Pérez Carrascosa FM2
1Univeristity Hospital Virgen de las Nieves, Granada, Spain; 2AMARAL Lobo, Granada, Spain

OBJECTIVES: To compare the cost-effectiveness of traditional treatment for ovarian stimulation in assisted reproduction techniques (ART) based on a combination of agonists of the Gonadotrophin released hormone (GnRH) versus a treatment based on the use of antagonist of the GnRH. METHODS: Cost-effectiveness analysis where both costs and outcomes are estimated by means of a clinical study carried out in the University Hospital Virgen de las Nieves of Granada (Spain) including patients in their first cycle. Effectiveness was measured as the number of ongoing pregnancies reached with each treatment. Direct costs were considered, for hospital and for patients as well. Markov model was used to simulate the clinical path of the compared treatments. Deterministic and probabilistic sensitivity analyses were used to analyse preliminary results. RESULTS: The clinical study included 274 patients, 138 treated with agonists and 136 with antagonists. No statistically significant differences were found regarding age, cause of infertility and infertility technique used. Deterministic analysis showed the agonists’ treatment to be more effective than antagonists (33/138 versus 20/136 pregnancies respectively) but more costly (mean cost €3,304.37 versus €3,066.64), with an incremental cost-effectiveness ratio (ICER) of €14,96. Deterministic sensitivity analysis showed high sensitivity of ICER to effectiveness but not cost model parameters. On the other hand, probabilistic analysis shows the agonists’ treatment to be a dominant strategy versus antagonist treatment. CONCLUSIONS: The use of antagonists of GnRH for ovarian stimulation in ART has been broadly discussed, but no cost-effectiveness studies have been carried out. Both, deterministic and probabilistic analyses show that, for women in the first cycle of ART, agonist treatment reports the best cost-effectiveness ratio in comparison with antagonist treatment. However, while the results of deterministic analysis are very sensitive to variations in treatment effectiveness, probabilistic analysis’ results reveal a robust dominance of agonists treatment.

ECONOMIC EVALUATION OF THE TRANSDERMAL CONTRACEPTIVE PATCH EVA in MEXICO: THE POPULAR HEALTH CARE SYSTEM PERSPECTIVE

Reyes A1, Hernandez Casas N2, Martinez Chequer JC3, Soto-Molina H4, Calaya JMP1, Castillejos C2
1Mexican Children Hospital, Mexico City, D.F., Mexico; 2Private physician, Mexico, Mexico; 3Private consulting, Mexico, Mexico; 4Private physician, Mexico, Mexico; 5Jansen Clig, Mexico, Mexico

OBJECTIVES: To perform a pharmacoeconomic evaluation of Eva in Mexico from the perspective of insurance companies. METHODS: We used a Markov analytical model to assess costs and benefits of hormonal contraceptive methods taken from the 2006 National Demography Survey and literature review. Contraceptive methods costs were calculated using the market prices, while mean values of medical reimbursement tabulator were used as proxy of pregnancy costs and adjusted to 2009 values. RESULTS: One-way sensitivity analysis cost-savings exhibited a growing pattern until year 3, and a decreasing trend towards year 5. These results were consistent for all cohorts, however certain differences were observed between 15–19 and 25–29 age-groups at year 1. CONCLUSIONS: Compared with OC’s, Eva represents a more effective and less costly contraceptive method for Mexican women.

COST-EFFECTIVENESS ANALYSIS OF THE NEW FERTILITY TREATMENT (rFSH-rLH)

Palumbo A1, Hernandez J1, Espallardo O2, Crespo C2
1Centro de Asistencia a la Reproducción Humana de Canarias, Santa Cruz de Tenerife, Spain; 2Meric, Madrid, Spain; 3Oblike Consulting, Barcelona, Spain, Spain

OBJECTIVES: To compare the cost-effectiveness of traditional treatment for ovarian stimulation in assisted reproduction techniques. Deterministic and probabilistic sensitivity analyses were used to analyse preliminary results. RESULTS: The clinical study included 245 patients, 137 treated with rFSH and 108 with rLH. Both treatments were dominated, however mean age was significantly lower(rLH 35.27 years versus rFSH 39.63 years). The non parametric Wilcoxon test showed in both treatments a significant difference in pregnancy rates (rFSH 35.94% and rLH 34.16%, P < 0.05). Probabilistic sensitivity analysis showed that, for ages 25–29, being contraceptive method the main cost driver for both options. Also Eva enable to prevent between 10 and 14 additional pregnancies compared against OC’s. From one-way sensitivity analysis cost-savings exhibited a growing pattern until year 3, and a decreasing trend towards year 5. These results were consistent for all cohorts, however certain differences were observed between 15–19 and 25–29 age-groups at year 1. CONCLUSIONS: Compared with OC’s, Eva represents a more effective and less costly contraceptive method for Mexican women.