costs. **RESULTS:** Nexplanon was dominant in the base case and in the majority of sensitivity analyses. Nexplanon® allows to avoid 1.6 ‰ pregnancy per year over hormonal IUD, 7.3 ‰ over copper IUD and more than 24.7 ‰ over COC with savings of 115€ over hormonal IUD, 58€ over copper IUD and more than 868€ over COC. At a threshold of 10,000€ per unintended pregnancy avoided, Monte Carlo simulations demonstrated an 82.0% probability for Nexplanon® to be the most cost-effective method. An alternative analysis was proposed evaluating the cost per abortion avoided. In this analysis, the ICER of Nexplanon® versus copper IUD was 8,896€ per abortion avoided while all other methods were strictly dominated. **CONCLUSIONS:** Nexplanon® is the most cost-effective strategy when compared to other reimbursed contraceptive methods. Additionally, this analysis demonstrates that Long-Acting Reversible Contraception (LARC) is dramatically more efficient than oral contraception.

PIH20

POPULATION COST-EFFECTIVENESS OF A PARENTING PROGRAM FOR THE TREATMENT OF CONDUCT DISORDERS: A MODELLING STUDY TO ASSIST PRIORITY SETTING IN AUSTRALIA

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OBJECTIVES: Conduct disorders (CD) are common psychiatric disorders in children, and place a high burden on the individuals and society. Parenting programs are the gold standard for the treatment of CD but little is known about their possible longer-term cost-effectiveness. The study evaluated the population cost-effectiveness of Triple P, the most widely researched parenting program, for the treatment of CD in children, from the health sector perspective. This study is part of a series of economic evaluations undertaken at the Centre for Research Excellence in Mental Health Systems Improvement in Australia. **METHODS:** A population-based Markov model was developed to estimate the cost per disability adjusted life year (DALY) averted of Triple P compared with no intervention. The target population was a cohort of 5-9 year old children with CD in the 2013 Australian population followed through the age of 18 years. Multivariate probabilistic and univariate sensitivity analysis were conducted to incorporate uncertainty in the model parameters and investigate the impact of assumptions in the outcomes. **RESULTS:** Triple P was evaluated in three formats: Group face-to-face, Self-directed (SD)+telephone assisted, and a mixed provision alternative of 50% Group+50% SD+telephone. Group face-to-face had an incremental cost-effectiveness ratio (ICER) of AU$19 069 per DALY averted with a 0.998 probability of cost-effectiveness; SD+telephone had an ICER of AU$31 920 per DALY averted with a 0.931 probability of cost-effectiveness; and the mixed provision alternative had an ICER of AU$25 494 per DALY averted with a 0.986 probability of cost-effectiveness. **CONCLUSIONS:** Triple P for the treatment of CD is good value for money and should be considered as part of the priority setting process in Australia. Group face-to-face Triple P is the most cost-effective option. The model will be used for economic evaluations of other interventions targeting CD.

PIH21

BIOSSIMILARS, ARE THEY REALLY COST SAVING? THE CASE OF RECOMBINANT HUMAN FOLLICLE STIMULATING HORMONE IN PORTUGAL

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OBJECTIVES: To estimate the cost-effectiveness of the original r-hFSH (Gonal-f) when compared with one biosimilar (Bemfola) using the evidence from a head-to-head registration trial. **METHODS:** An Excel-based decision-tree model was developed depicting the different relevant outcomes that result from fertility treatment with r-hFSH. Probabilities were populated using the data from a head-to-head trial used by the biosimilar for its registration at EMA, using as relevant outcome the take-away baby rates found in the trial. Costs were populated from Portuguese official sources and include the cost of the two drugs, as well as the costs related with treatment, such as costs for IVF, ICSI, child delivery and abortion. The analysis was performed from a societal perspective including only direct medical costs with no discounting since all costs occur in a single year. **RESULTS:** According to the model, treatment of 1.000 women with Gonal-f will result in a total number of 447 pregnancies, with 407 women achieving a new-born child. Total cost for this will be 3.062.802,80 €, for a cost per woman achieving a new-born child of 7.534,49 €. Respective values for the biossimilar are 361 pregnancies and 321 women with new-born children. Total cost for this alternative is 2.957.530,12 €, resulting in a cost per new-born child of 9.205,31 €. Incremental cost-effectiveness ratio obtained for Gonal-f vs Bemfola is 1.235,32 € per woman with a new-born child. Sensitivity analysis did not change the hierarchy in the results except on extreme values. For cost-effectiveness ratios to be similar the biosimilar would need a 91% price reduction. **CONCLUSIONS:** The biossimilar is extendedly dominated by Gonal-f, with its cost-effectiveness ratio being higher than the one found for Gonal-f. Under the current scenario the use of the biossimilar is not a cost-effective alternative to the use of Gonal-f and thus should be avoided.

PIH23

COST-EFFECTIVENESS OF CONJUGATED ESTROGENS/BAZEDOXIFENE FOR THE TREATMENT OF VASOMOTOR SYMPTOMS IN THE UNITED STATES

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OBJECTIVES: To estimate the cost-effectiveness of conjugated estrogens/bazedoxifene (CE/BZA) compared with conjugated estrogens/medroxyprogesterone (CE/MPA) or no treatment in a cohort of postmenopausal U.S. women exhibiting vasomotor symptoms (VMS), with an intact uterus and at least 12 months since their last menses. **METHODS:** A Markov cohort model was developed to compare CE/BZA with CE/MPA or no treatment in terms of costs and Quality Adjusted Life Years (QALYs). The model considered VMS, vaginal bleeding, and eight long-term events (LTEs): Hip fracture, vertebral fracture, breast cancer, colorectal cancer, ovarian cancer, coronary heart disease, stroke and venous thromboembolic events. Health states were mutually exclusive. Women were followed through a VMS phase and an additional post-VMS phase in order to assess the treatment effects on the LTEs, representing a life-time horizon. Women were assumed to experience VMS and receive treatment for 4 years, additionally, onset of vaginal bleeding or any LTE resulted in treatment discontinuation. The model utilized data for treatment effects (estimated via network meta-analyses), risks, mortality, quality of life (QoL – using EQ5D estimates) and costs, which were identified from a literature review. The main outcome was cost per QALY. **RESULTS:** Results showed that CE/BZA lead to a gain in QALYs but was associated with higher total costs, resulting in a cost per QALY of $12,949 and $26,066 when compared with CE/MPA and no treatment, respectively. Driven by fewer bleeding events, women on CE/BZA received treatment for a longer duration than women receiving CE/MPA. The LTEs impacted results modestly. Uncertainty analyses indicated that results were robust to changes in key assumptions and input data, however results were most sensitive to changes in QoL associated with VMS and vaginal bleeding. **CONCLUSIONS:** CE/BZA is considered cost-effective for the treatment of VMS in postmenopausal women when compared with either CE/MPA or no treatment in the United States.

PIH24

THE COMPARATIVE PHARMACOECONOMIC ANALYSIS OF USING KORIFOLLITROPIN ALFA WITH GANIRELIX AND FOLLITROPIN ALFA WITH CETRORELIX FOR OVARIAN STIMULATION

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OBJECTIVES: Corifollitropin alfa, a fusion protein, has a longer elimination half-life and extended time to peak levels than recombinant FSH (rFSH). The main aim of this study was to perform comparative pharmacoeconomic analysis of using korifollitropin alfa with ganirelix and follitropin alfa with cetrorelix for ovarian stimulation. **METHODS:** Analysis of the published clinical trials was conducted to evaluate comparative efficacy and safety of the studied therapy options. Direct medical costs included drug therapy and hospital treatment. Taking into account the hypothesis of equal effectiveness of using korifollitropin alfa with ganirelix and follitropin alfa with cetrorelix for ovarian stimulation for pharmacoeconomic analysis was chosen “cost minimization” analysis (CMA). Direct medical costs were calculated for 1 patient. In this study were performed 2 variants of ovarian stimulation costs, in 1st variant was compared only korifollitropin alfa with ganirelix and follitropin alfa with cetrorelix, in 2ndvariant - korifollitropin alfa plus follitropin beta with ganirelix and follitropin alfa with cetrorelix. **RESULTS:** According to published trials corifollitropin alfa was a novel and effective treatment option for potential normal responder patients undergoing ovarian stimulation with gonadotropin co-treatment resulting in a high ongoing pregnancy rate, equal to that achieved with daily rFSH. The average cost for 1st variant of a course of korifollitropin alfa with ganirelix was 34 285 rubles ($ 640), and follitropin alfa with cetrorelix – 65 352 rubles ($ 1 220). The average cost for 2nd variant of a course of korifollitropin alfa plus follitropin beta with ganirelix was 66 886 rubles ($ 1 249), and follitropin alfa with cetrorelix – 65 352 rubles ($ 1 220). The CMA has shown that annual savings when used for ovarian stimulation 1stvariant without follitropin beta will be 18%. **CONCLUSIONS:** The using for ovarian stimulation korifollitropin alfa with ganirelix was more economically justified treatment option.

PIH25

EXAMINING THE ECONOMIC BURDEN AND HEALTH CARE UTILIZATION OF MENOPAUSAL WOMEN IN THE U.S. MEDICAID POPULATION

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OBJECTIVES: To examine the economic burden and health care utilization of menopausal women in the U.S. Medicaid population. **METHODS:** Female patients diagnosed with menopausal symptoms and/or those prescribed estrogen hormone therapy were identified using the U.S. Medicaid database from 01JUL2008 through 30JUN2010. The first diagnosis or prescription date was designated as the index date. Control patients were identified during the same time period and assigned a random index date. Patients in both cohorts were required to be aged 40-65 years and have continuous, fee-for-service medical and pharmacy benefits, 6 months pre- and post-index date. Controls were matched to cases based on age, state, race and index study year. Health care resource utilization and costs during the 6-month follow-up period were compared between the menopause and control cohorts. Generalized linear models were used to adjust for differences in baseline and demographic characteristics between the cohorts. **RESULTS:** A total of 71,076 patients were included in each cohort. Patients in the menopause cohort were significantly more likely to be diagnosed with depression (23.4% vs. 17.3%, $p<0.001$) and anxiety (11.6% vs. 8.0%, $p<0.001$) compared to those in the control cohort. After adjusting for baseline and demographic characteristics, significantly more patients in the Menopause Cohort had inpatient (10.9% vs. 9.3%, $p<0.001$), outpatient hospital (80.6% vs. 34.7%, $p<0.001$) and physician office visits (89.7% vs. 74.8%, $p<0.001$). Higher health care utilizations translated to higher health care costs for menopausal patients ($7,237 vs. $6,739, $p<0.001$) compared to control patients. **CONCLUSIONS:** Patients diagnosed with menopausal symptoms or treated with hormone therapy incurred significantly higher health care utilization and costs compared to women without menopausal symptoms or treatment.

PIH26

COST-EFFECTIVENESS OF RECOMMENDED MEDICAL INTERVENTION FOR TREATMENT OF DYSMENORRHEA AND ENDOMETRIOSIS IN JAPAN SETTING

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