

measure cost-effectiveness. **RESULTS:** The total costs for the average patient are lower when using menotrophin (DKK 13,324; 95%CI: 12,583–14,282) compared with rFSH (DKK 15,852; 95%CI: 15,164–16,614). Furthermore, the cost per clinical pregnancy was lower with menotrophin (DKK 59,282; 95%CI: 50,207–72,056) compared with rFSH hormone (DKK 82,474; 95%CI: 68,389–102,867). Menotrophin is therefore less expensive both to the patient as well as to the health care sector. A result which was supported by a bootstrap analysis with 1000 replications. Use of menotrophin can result in savings up to 16 million DKK on the drug budget per year. Savings that could finance 1400 additional IVF cycles. **CONCLUSION:** The analysis has shown that menotrophin compared with rFSH is a cost-effective choice that is rational to the society and to the health care sector leading to savings to the patient and the drug budget.

PIH3**VACCINATION WITH RIX4414 IS COST-EFFECTIVE IN A BELGIAN SETTING**Fruytier A¹, Van Schoor J², Standaert B³¹UCL, Marche, Luxembourg, Belgium, ²GlaxoSmithKline Belgium, Genval, Brabant, Belgium, ³GlaxoSmithKline Biologicals, Rixensart, Belgium

OBJECTIVES: RIX4414, an oral live-attenuated human rotavirus (RV) vaccine, has shown to be highly protective against RV gastroenteritis. The question rises whether the implementation of vaccination is a cost-effective (CE) management strategy. **METHODS:** An economic modelling exercise was performed to evaluate the CE of vaccination in a Belgian setting. The model used a Markov process tree, the cycle length was one month with a lifetime horizon. Effect of seasonality of the infection and of breastfeeding protection was captured through the model. Acute diarrhoea events were recorded until the age of 5. Assumed was that the risk for acute RVGE rapidly decreases after age 5 due to the acquired natural immunity. Estimates on RV epidemiology were obtained from Belgian databases and literature. QALY was the overall effect measure. Utility-score estimates for age-groups and health states were obtained through the EQ-5D from a UK study. The vaccine effect was as reported from phase IIIb European trial (102247-NTC0014686). Annual discount rates for cost and effect measures were 3% and 1.5%, respectively. 100% coverage was assumed in base-case analysis but sensitivity analyses were performed on key variables in the model. **RESULTS:** The model estimated the direct medical cost (DMC) at around €6.75 million/year (hospitalisation costs accounted for 64%), whilst indirect costs accounted for an additional €12 million/year. Threshold for being CE was set at ≤€50,000/QALY. The analysis indicated that over a lifetime horizon vaccination with RIX4414 is cost-effective including only DMC (€77.4/dose). This strategy with the same price/dose induced cost savings when also indirect costs were included in the equation. Sensitivity analysis indicated that when emergency visits and hospitalisation rates were substantially reduced (<20%) vaccination was cost-effective when DMC and indirect costs were considered. **CONCLUSIONS:** RIX4414 vaccination is a cost-effective strategy in a Belgian environment selecting a wide variety of scenarios in a societal perspective.

PIH4**THE COST EFFECTIVENESS OF IVF IN ITALY: IMPLICATIONS OF A NEW LAW**

Dale PL

United BioSource Corporation, London, UK

OBJECTIVES: The Italian government recently banned embryo cryopreservation for in vitro fertilization (IVF). The objective of

this study was to compare the cost effectiveness of IVF with and without the option of embryo freezing over three cycles of IVF from the Italian NHS perspective. **METHODS:** A decision analytical model was developed to evaluate the cost and cost-effectiveness of two potential treatment approaches in couples attempting IVF: (A) To perform three IVF fresh cycles including the option of frozen embryo transfer; and (B) To perform three IVF fresh cycles with no frozen embryo transfer. No treatment was used as the reference strategy. Efficacy data were derived from clinical trials and the Italian IVF registry. A micro-costing approach was used to determine the cost of fresh and frozen IVF cycles. Drug costs and hospitalization costs were derived from published sources. The primary outcome was measured in terms of a live birth. Uncertainty surrounding the CE ratio was tested using one-way sensitivity analysis. **RESULTS:** The model predicted a cumulative live birth rate after three completed IVF cycles of 30.9% in the strategy using cryopreservation compared to 25.3% in the IVF without cryopreservation approach. The total cost per treatment was €4905 with the no frozen embryo transfer strategy versus €5453 for the frozen embryo transfer. The strategy to perform IVF without cryopreservation was extensively dominated by the combination of no treatment and IVF plus cryopreservation strategies. The incremental cost per additional live birth was €21,863 for the IVF with embryo cryopreservation compared to the no treatment alternative. Results were most sensitive to variations in the cost of an IVF treatment cycle. **CONCLUSIONS:** Providing three cycles of IVF with the frozen embryo option on the National Health Service in Italy compares favorably to the option of allowing infertile couples only three cycles of IVF.

PIH5**COST-EFFECTIVENESS OF DUTASTERIDE IN THE TREATMENT OF BENIGN PROSTATIC HYPERPLASIA (BPH)**Kaczor M¹, Pawlik D¹, Becla L¹, Dardzinski W¹, Jasinska A¹, Wojcik R¹, Walczak J¹, Nogas G¹, Cel M², Glogowski C², Zespol-Instytutu A¹¹Arcana Institute, Cracow, Poland, ²GSK Commercial Sp. z o.o., Warsaw, Poland

OBJECTIVES: To compare the clinical and cost-effectiveness of dutasteride with placebo and finasteride in BPH. **METHODS:** Systematic review according to Cochrane Collaboration guidelines and clinical effectiveness analysis according to Polish Pharmacoeconomic Guidelines were performed. In the absence of relevant head-to-head RCT dutasteride vs finasteride on clinical hard endpoints, meta-analysis was performed using an indirect comparison, with placebo as the common reference (Bucher method). Cost-effectiveness Markov model was performed from payer perspective (health insurance), using costs data from published sources and a lifetime horizon. **RESULTS:** Dutasteride vs placebo: 3 clinical trials were included. Dutasteride treatment was associated with statistically significantly greater reduction in urological symptoms (AUA-SI scale) compared to placebo, with difference in changes of 1.1, 1.4 and 2.2 points after 12, 18 and 24 months, respectively. There was statistically significant difference in BPH Impact Index after 6 months ($p < 0.005$) and after 24 months of follow-up ($p < 0.001$). Dutasteride significantly reduced risk of acute retention of urine (OR = 0.42), prostate cancer (OR = 0.56) and necessity of surgical intervention (OR = 0.51). Average costs (including costs of drugs, complications and prostate cancer treatment) and effects (life-years with no surgery/prostate cancer) were: dutasteride 5298 PLN/8 LY; placebo 2426 PLN/6.25 LY. ICER for dutasteride vs placebo comparison was 1645 PLN/LY without surgery/Prostate cancer. Dutasteride vs finasteride: 12 trials were included (1 direct and