be cost-effective compared to the most prominent comparators in management of infertility in The Netherlands.

**PIH33**

**COST-EFFECTIVENESS OF LONG-ACTING REVERSIBLE CONTRACEPTION: LNG-IUS 13.5 mg and LNG-LEVONORGESTREL INTRAUTERINE SYSTEM VERSUS ORAL CONTRACEPTIVES**

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**OBJECTIVES:** This study aimed to evaluate the cost-effectiveness of LNG-IUS 13.5 mg, a low-dose hormonal intrauterine contraceptive system for use up to 3 years, relative to the most commonly used oral contraceptive (OC) in Canada from a societal perspective.

**METHODS:** A state-transition model was developed to model the cost-effectiveness of LNG-IUS 13.5 mg over 3 years in a cohort of 1,000 women of reproductive age (15-44 years). The comparator was a generic version of the 100 mcg levonorgestrel-releasing intrauterine system (LNG-IUS) consisting of a mutually exclusive health states: initial contraceptive method, unplanned pregnancy (UP) due to contraceptive failure and subsequent contraceptive method, taken up following UP or due to discontinuation of the initial method. The subsequent contraceptive method for the comparator was a pill. Sensitivities were performed to quantify the expected increase in OCR as a consequence of acceptance and utilization of LNG-IUS 13.5 mg. The base case market price for LNG-IUS 13.5 mg was $0.005 to $0.780 2013 US dollars per delivery. 

**RESULTS:** The cost-effectiveness ratio also incorporated the additional costs associated with the uptake of the subsequent contraception. Contraceptive failure and discontinuation rates were taken from published literature, resource use was estimated from product monographs and unit costs were taken from provincial administrative databases. Analysis of the societal perspective allowed the model to incorporate economic costs associated with missed work. The model output was cost per UP avoided. Probabilistic sensitivity analyses (PSA) were performed. 

**RESULTS:** LNG-IUS 13.5 mg dominated the comparator, resulting in fewer UP (8 vs 18) and lower total cost ($660,224 vs $1,102,456), representing a savings of $437,232 over 3 years. Overall savings resulted from fewer UP and avoided costs associated with the uptake of the subsequent contraceptive method. PSA results indicated a high probability of dominance of all iterations showed LNG-IUS 13.5 mg to be more effective and less costly. 

**CONCLUSIONS:** LNG-IUS 13.5 mg is an effective contraceptive option that generates savings compared to a generic OC.

**PIH34**

**ECONOMIC EVALUATION OF OXYTOCIN IN UNELECTED INJECTION SYSTEM VERSUS STANDARDS OF FIVE FOR THE PREVENTION OF POSTPARTUM HEMORRHAGE IN LATIN AMERICA**

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**OBJECTIVES:** Postpartum hemorrhage (PPH) is a leading cause of maternal death. Although the strong evidence showing the efficacy of oxytocin in preventing PPH, its use remains suboptimal. The unselected injection system pre-filled with oxytocin (Oxyt) has been shown to be cost-effective in developing countries. 

**METHODS:** A decision tree was created to estimate the survival probabilities and costs of PPH treatment. The costs were estimated throughout an expert consensus and were expressed in US dollars (USD) from the payer perspective. Resource use was estimated from product monographs and unit costs were taken from provincial administrative databases. Analysis was performed from the perspectives of the US consumer and payer. 

**RESULTS:** The cost of Fringerin 0.5 mg vial was $11,326, $24,254 for males and $5,885, $8,910, $20,145 for females, respectively, for 1, 2, 3, and 4-5 cups/day male (0.72, 1.23, 1.48, and 1.22) and female (0.53, 1.42, 1.77, 1.65) consumers, respectively, versus non-consumers. ICERs per discounted LY gained were $5,461, $15,264, $30,528, $59,904 for males and $5,885, $8,910, $20,145 for females, respectively, for 1, 2, 3, and 4-5 cups/day consumption of home-prepared coffee; 6 cups/day was strictly dominated. Consumption of 4-5 cups per day purchased from high-cost vendors was not cost-effective, with ICERs >$50,000/LY gained. 

**CONCLUSIONS:** In this analysis, coffee consumption was associated with increased LYs and was shown to be potentially cost-effective, especially if home-prepared or purchased from low-cost vendors. Given the observational nature of the study data, further research is warranted to validate these findings.

**PIH37**

**COST EFFECTIVENESS ANALYSIS OF THE USE OF HUMAN FIBRINOGEN (CLOTTAFACT®) IN MASSIVE POST-PARTUM HEMORRHAGE IN MEXICO**

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**OBJECTIVES:** To evaluate the cost-effectiveness of fibrinogen (Fringerin) therapy in the management of massive PPH using the recently approved fibrinogen replacement (Clottafact®) in the hematologic treatment of massive PPH in recent LAC literature. 

**METHODS:** We built a mathematical model to estimate the impact of replac- ing oxytocin in ampuoles with Oxyt on the incidence of PPH, quality-adjusted life years (QALYs) and costs from a health care perspective. A systematic search for data on epidemiology and cost studies was undertaken. A consensus panel among LAC experts was performed to quantify the expected increase in OCR as a consequence of replacing oxytocin in ampuoles with Oxyt. Deterministic and probabilistic sensitivity analyses were performed. 

**RESULTS:** In the threshold analysis the minimum required increment in the OCR to make Oxyt a cost-effective strategy ranged from 1.3% in Suriname to 16.2% in Haiti. The model showed that Oxyt was more effective and less costly than Fringerin 0.5 mg vial for 1, 2, 3, and 4-5 cups/day male (0.72, 1.23, 1.48, and 1.22) and female (0.53, 1.42, 1.77, 1.65) consumers, respectively. Fringerin was assumed to save 1.7, 2.6, 2.0, and 2.8 days compared to the comparator. The probability that Oxyt would be cost-effective increased from 25.0% (1 cup/day) to 61.2% (6 cups/day). The probability for the comparator was 2.3% (1 cup/day) to 14.1% (6 cups/day).

**CONCLUSIONS:** Oxyt showed to be less costly and more effective as compared to Fringerin and has a higher probability of being cost-effective in moderate-high income countries in Latin America.