study was set; methods employed; the inclusion of active comparators; and study endpoints. Data were extracted from each study to data extraction form.

RESULTS: Seventeen studies met our inclusion criteria and were included in our dataset. Many of these analyses’ have concluded that FET is cost-effective; 38% of the cost-effectiveness analyses’ findings indicate ICERs less than $50,000 (2012 USD). However, the inclusion of FET benefits in health economic evaluation literature more broadly with 35% of studies published since 2009. Across all years, a smaller proportion of studies examining FET emanated from the US than from other countries. Most cost-effectiveness analyses considered age generally (99% vs. 42%). The majority of these studies examined FET for oncological indications (n=58, 83%). The most common analytical method employed was cost-effectiveness analysis, although two cost-minimization studies were also identified. Studies typically compared FET to either x-ray computed tomographic imaging or usual care. Diagnostic accuracy was the most common unit of effectiveness reported. CONCLUSIONS: There is substantial literature evaluating the cost-effectiveness of FET across a range of indications. Most studies presented a cost-effective analysis and not considered incremental costs, such as how FET imaging influences clinical decision making or changes patient outcomes.

PH28 COST-BENEFIT ANALYSIS OF CENTRALIZING CITY-WIDE MULTI-INSTITUTIONAL NEONATAL TOTAL PARENTERAL NUTRITION AT A SINGLE PEDIATRIC INSTITUTION
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OBJECTIVES: Centralizing city-wide neonatal total parenteral nutrition (TPN) production would reduce production errors through standardized processes and order sets and pediatric pharmacist review. However, it is unclear if the benefits justify the cost. The purpose of this study was to determine the costs and benefits of centralizing production and compare institutional neonatal TPN production at a single city-wide institution. A second objective was to calculate the error reduction potential by centralizing neonatal TPN preparation. METHODS: We performed a cost-benefit analysis to determine the cost-effectiveness of centralizing neonatal TPN preparation at multiple large, nonprofit tertiary care pediatric hospitals by pediatric pharmacists vs. decentralized preparation at multiple large, nonprofit tertiary care adult hospitals by staff pharmacists. Costs and benefits were modeled using decision analysis and counterfactual analysis. Data was collected from a licensed vaccine decreases in time which, faced with increasing disease risks, makes age of vaccination crucial. OBJECTIVES: To evaluate the cost effectiveness of HZ vaccination among adults aged ≥50 years and identify the public health and economic implications. METHODS: We used a decision analysis model to compare the age-specific incidence, health care resource utilization, costs and quality-adjusted life years (QALYs) related to HZ, PHN and non-complications among vaccinated and unvaccinated individuals at either age 50, 60 or 70 years. Health outcomes, resource utilization and costs were projected for the US cohorts from 50 to 99 years of age. It incorporates HZ-specific QALY scores for duration and intensity of pain and the probabilities for Monte Carlo simulations. QALYs were calculated from vaccine and non-vaccine cost-effectiveness articles. Sensitivity analyses were conducted on vaccine efficacy duration and other variables. RESULTS: Vaccinating at age 60 would prevent more shingles cases (26,147 cases per million people) followed by vaccinating at age 70 while vaccinating at age 50 prevents the less number of shingles cases (21,269 vs. 19,795 respectively). However, vaccinating at age 70 would be the strategy with the biggest impact (8,055 FHN cases prevented), followed by age 60 and then age 50 (4,055 vs. 1,012 FHN cases prevented, respectively). Vaccinating at age 70 and 50 would socially cost $38,000, $80,000 and $272,000 per QALY saved, respectively. CONCLUSION: Overall, the optimal age for vaccination would be at 70 years. While various uncertainties remain, our results were robust based on the sensitivity analyses and the magnitude of the differences in outcomes and costs between strategies.

PH32 ECONOMIC EVALUATION OF IN-VITRO FERTILIZATION AS ASSISTED REPRODUCTIVE TECHNIQUE IN MANAGEMENT OF INFERTILITY IN THE NETHERLANDS: A COST-EFFECTIVENESS MODEL BASED ON A LONG-DOWN-REGULATION PROTOCOL
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OBJECTIVES: To conduct an economic evaluation comparing a recombinant gonadotrophin (r-NFSh, follitropin alfa, GONAL-f) with two classes of urinary gonadotrophins, human menopausal gonadotrophin (HMG) and u-FSH (Fostimon) for ovarian stimulation in women undergoing in-vitro fertilization (IVF) treatment in The Netherlands. METHODS: A pharma-economic model was developed, simulating each step in IVF protocol from start of therapy until either live birth, new IVF treatment cycle, or stopping IVF, following a long-down-regulation protocol. A decision tree combined with a Markov model describes progression through each health state, including oocyte retrieval, fresh embryo transfer, up to two subsequent cryo-embryo transfers, and (ongoing) pregnancy or miscarriage. A health insurer perspective was chosen and the time horizon was set to a maximum of three consecutive treatment cycles. Transition probabilities and cost data were derived from a real-world observational outcomes database (German) and official tariff lists (The Netherlands). Adverse events were considered equal amongst comparators and therefore excluded. The model was populated by clinical evidence and outcomes data from treatment cycles and management of infertility and applicability. A Monte Carlo simulation with 5,000 iterations was undertaken for each strategy to explore uncertainty and to construct uncertainty acceptance curves. RESULTS: Main outcomes were presented in the sensitivity analysis table (UI). RESULTS: Main outcomes are displayed in the table below. Transformed cost per live birth estimates are: $15,674 (GONAL-f), $16,878 (Fostimon) and $17,636 (Menopur). Probabilistic sensitivity analysis indicates a probability of 72.5% that GONAL-f is cost-effective at a willingness-to-pay of $20,000/live birth. Probabilistic results remained constant under several analyses. CONCLUSIONS: GONAL-f appears to be...