PMD38
DO NOT OVERLOOK YOUR COUNTRY-SPECIFIC CHARACTERISTICS: THE CASE OF BAROREXPRESSION ACTIVATION THERAPY (BAT) FOR THE TREATMENT OF RESISTANT HYPERTENSION
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OBJECTIVES: To assess clinical effectiveness, cost-effectiveness, and budget impact of Barorexpression Activation Therapy (BAT) in comparison with optimal medical treatment from a hospital and societal perspective in Spain. METHODS: Clinical effectiveness analysis was based on published literature and evidence. Cost-effectiveness and budget impact analysis was performed using the Falsely Start model which projects clinical effectiveness over a two-year time horizon, while budget impact was estimated by a two-way sensitivity analysis. RESULTS: Clinical effectiveness was calculated as an incremental cost-effectiveness ratio (ICER) of 12,925 Euros per Quality Adjusted Life Year (QALY). Cost-effectiveness analysis indicated that BAT had a mean cost per QALY of 13,401 Euros, which was significantly lower than the threshold of 20,000 Euros per QALY. Budget impact analysis showed that BAT would result in a savings of 1,380-3,190 Euros for Xience, and 1,240-1,930 Euros for Absorb. The results remained robust across a range of sensitivity analyses. CONCLUSION: BAT is a cost-effective and budget-saving treatment option for patients with resistant hypertension in Spain.

PMD39
ONE-YEAR COST-COMPARISON ANALYSIS OF ABSORB® VEVEROLIMUS ELUTING BIORRESORBABLE VASCULAR SCAFFOLD AND XIENCE™ EVEROLIMUS ELUTING STENT: BASED ON FINDINGS FROM ABSORBED
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OBJECTIVES: The objective of this study was to compare the one-year costs related to cardiac adverse events post-index procedure discharge of Absorb and Xience. METHODS: A budget impact analysis was performed using the Clinical Resource Use (CRU) model. 501 patients randomized 2:1, one-year cardiac-related adverse event costs were calculated for the Absorb and Xience groups in 5 countries (France, Germany, Italy, The Netherlands, and Spain). Unit costs were taken from publicly available sources (2014 level). Costs were calculated by lipid control and diabetic status, both at baseline. Resource use categories included hospital admissions, outpatient visits, and diagnostic tests. RESULTS: Mean country costs ranged between 1,340-1,880 Euros for Absorb and 1,310-2,420 Euros for Xience. Mean country-specific per patient cost differences (Absorb minus Xience) were 170 Euros in France, 220 Euros in The Netherlands, 250 Euros in Germany, 420 Euros in Italy, and 540 Euros in Spain. CONCLUSIONS: Cost-savings were mainly attributable to the 1.5 unit reduction in mean number of repeat PCIs. Future research is necessary to study total direct and indirect costs and clinical data. Ongoing epidemiological data and clinical monitoring—have a large weight on cost-effectiveness results.

PMD40
COST SAVING ASSOCIATED WITH GLUCOSE METER ACCURACY IN SPAIN
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OBJECTIVES: To perform economic evaluation of donor breast milk (DBM) (using clinical breast pump) or artificial formula (AF) for premature infants in the NICU. Methods: The single-catheter method was the recommended treatment. The total annual cost per patient was 2,016.41 Euros for AF and 2,621.28 Euros for DBM. Cost of providing AF was calculated using the mean cost per 100 ml for powdered AF and 1,000 ml for liquid AF. The total cost of providing DBM was measured as: the breast pump cost, the individual pumping set and staff costs. The cost of providing AF was calculated using the mean cost per 100 ml for powdered AF and staff costs. We also calculated the total cost per averted case of NEC within 35 days that is less than NEC treatment. The difference in costs (in favor of AF) amounted to 2,87 EUR per 100 ml with the use of BM. CONCLUSIONS: The cost of DBM is comparable to the cost of AF with a significant DBM clinical benefit. The costs per averted NE within 35 days shows that DBM is acceptable from the position of Russian health care system.

PMD41
COST ANALYSIS OF PCA UNIVERGRAPH 160-ITI TECHNIQUE FOR DETECTING MICROORGANISMS IN PATIENTS WITH SUSPECTED CHRONIC INFECTION AT MUSCULOSKELETAL IMPLANTS
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OBJECTIVES: Polymerase chain reaction (PCR) techniques could provide an earlier diagnosis than traditional techniques (TT) to identify chronic infections with musculoskeletal implants. The aim was to determine costs associated to microorganism’s diagnosis in sonicate samples of musculoskeletal implants, comparing traditional addition of a PCR technique (Univergraph 160-ITI) to TT versus only TT. METHODS: A preliminary cost analysis was developed to estimate the hospital costs in patients admitted at Fundación Jiménez Diaz Hospital (May-2014 to April-2015). All patients with musculoskeletal infection removed due to infection. Sonicated samples were tested for microbiological diagnosis using TT. Additionally, samples were tested using Univergraph 160-ITI. Medical hospitals records were reviewed for data collection: sociodemographic data; type, dosage and antibiotic treatments, and hospital length of stay (LOS). Intravenous vancomycin and cefazidime were selected as the initial empiric treatment. Replacement to a specific antibiotic was performed after microbiological diagnosis. Total estimated costs ($, 2015) included antibiotic treatment, hospital stay (1,006 per day) and Univergraph 160-ITI kits ($350 per kit). RESULTS: Ten patients were retrieved for preliminary analysis (average age: 75.39±6.31 years; 20% men). Hip (40%) and knee (40%) were the most frequent implant sites. Average period from implant removal to final diagnosis was 11.4±3.5 days. Median LOS was 24h after removal. LOS was 24.4 days for TT and 23.3 days for Univergraph 160-ITI added to TT. The average antibiotic treatment cost was $1,016.01 for TT and $976.84 for Univergraph 160-ITI added to TT. Hospital stay cost was $259,916.26 for TT and $124,361.98 for Univergraph 160-ITI added to TT. The use of Univergraph 160-ITI technique reduced the average total costs ($480.67. CONCLUSIONS: Univergraph 160-ITI PCR for microbiological diagnosis of musculoskeletal implants will minimize hospitalization, infection diagnosis and shorter hospital stay than traditional techniques only, allowing cost savings at hospital level.

PMD42
THE COST OF NUTRITION ALTERNATIVES FOR PREMATURITY INFANTS IN THE NEONATAL INTENSIVE CARE UNIT IN RUSSIA
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OBJECTIVES: To perform economic evaluation of donor breast milk (DBM) (using clinical breast pump) or artificial formula (AF) for premature infants in the NICU. A100% of T1D (n: 116,160) and 32.2% of T2D patients (n: 172.98 million). With 60-70% of T1D and 25-30% of T2D it seems appropriate to decrease complications risk which is associated with cost savings: when complications (e.g. symptomatic UTI, UTI resistant to antibiotics, pyelonephritis, chronic kidney disease etc) are avoided. The resulting incremental cost-effectiveness ratio (65.000 € per QALY) was substantially larger than the one estimated for the Northern European studies. The cost-saving was the difference between the total cost (2015 calculations) of providing AF at NICU and the use of DBM. The single-catheter method was the recommended treatment. The total annual cost per patient was 1,006.41 Euros for AF and 1,621.28 Euros for DBM. Cost of providing AF was calculated using the mean cost per 100 ml for powdered AF and 1,000 ml for liquid AF. The total cost of providing DBM was measured as: the breast pump cost, the individual pumping set and staff costs. The cost of providing AF was calculated using the mean cost per 100 ml for powdered AF and staff costs. We also calculated the total cost per averted case of NEC within 35 days that is less than NEC treatment. The difference in costs (in favor of AF) amounted to 2,87 EUR per 100 ml with the use of BM. CONCLUSIONS: The cost of DBM is comparable to the cost of AF with a significant DBM clinical benefit. The costs per averted NE within 35 days shows that DBM is acceptable from the position of Russian health care system. When calculating the costs of DBM with the use of BM, DBM costs exceed those for AF for more than 5 times.
complications was 1243 euros in the single-use group and 2067 euros in the re-use group. AM and BMT were assumed to have equivalent efficacy to DBS. The cost analysis covered: device acquisition, implantation, abnormal event management, concomitant drug use, device replacements and follow-up. Cost data were taken from Swedish tariffs, drug list prices and device prices. Costs and QALYs were both discounted at 3.0% per year. RESULTS: The incremental cost-effectiveness ratio for DBS versus BMT was SEK 387,313 per QALY gained, using a time horizon of 15 years. DBS was predicted to be cost-saving versus Duodopa at 5 years (with a saving of SEK 534,000 per patient) and at 10 years versus Amphetamine. The key parameters in the model were the costs of the DBS device components and the unit costs of the advanced drug therapies. CONCLUSIONS: The results suggest that DBS is a cost-effective intervention compared with BMT, based on the informal threshold used in Sweden (SEK 500,000 per QALY gained). When compared against Amphetamine and Duodopa, the high initial costs of DBS equipment and implantation are offset in the long-term by reduced medication costs.

PMD44 ECONOMIC BENEFITS OF ENDOMETRIAL RADIOFREQUENCY ABLATION COMPARED WITH OTHER ENDOMETRIAL ABLATION TECHNIQUES IN WOMEN WITH LEUKOCYTOSIS:

A RETROSPECTIVE ANALYSIS WITH GERMAN HEALTH CLAIMS DATA

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OBJECTIVES: It is estimated that approximately 30-30% of all women worldwide are affected by menorrhagia once in their lifetime. Several endometrial ablation techniques are available to reduce the uterine bleeding. The radiofrequency ablation (RFA) is easier and faster to apply and hence result in cost savings compared to other ablation techniques. A meta-analysis using data from 32 studies were analysed (5% of the German SHI population). 32,446 patients suffering from menorrhagia were identified. These cases were further investigated for the application of RF ablation. Further information is gathered on the laparoscopic/robotic ablation (collateral/loop resection/ballon thermal ablation (collarprop)). Propensity score matching (PSM) was used to make both study groups appropriately comparable. Patients were observed for a follow-up period of 2 years. RESULTS: After performing PSM, 50 cases were observed for at least 24 months while 38 cases were included in the control group. Data showed that patients treated with RFA would cause higher costs at the time point of treatment compared to others (€2,068 vs. €1,490, n.s.). However, during the 2-year follow-up period, the overall costs for controls were €4,561 vs. €5,815, n.s.). The main cost drivers were medication costs from the outpatient setting (€495 vs. €1,128, n.s.), outpatient physician consultations (€1,355 vs. €1,683, n.s.) and inpatient treatments (€2,025 vs. €2,736, n.s.). The savings of a follow-up compared the higher costs in the beginning, so that each patient treated with RFA caused 676 less costs than patients treated with other endometrial ablation techniques. CONCLUSIONS: Although having small sample sizes, the results showed that patients treated with RFA cause less overall costs within 2 years. Main reasons for differences in costs were medications prescribed in the outpatient setting, inpatient treatments and outpatient physician consultations.

PMD45 COSTS AND COST-EFFECTIVENESS OF NON-INVASIVE PREGNATAL DIAGNOSIS (NIPT) FOR DETECTION OF TRISOMY 21 IN SWEDEN

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OBJECTIVES: Invasive prenatal testing (NIPT) is a method that is based on small portions of cell-free fetal DNA (cfDNA) that is present in the woman’s blood during pregnancy. Analysis of cfDNA in a blood sample can be used for different types of prenatal diagnosis. The use of NIPT to detect trisomies has developed rapidly over the past four years. The aim of this study was to examine the costs and cost-effectiveness of NIPT to detect trisomy 21 (T21, Down’s syndrome) in Sweden. METHODS: The procedures of a cost-analysis and a cost-effectiveness analysis were followed using true number of detected T21 as outcome. The main comparator was the 1st trimester combined test (nuchal translucency (NT) in combination with levels of free-β-HCG and PAPP-A). For the estimation of sensitivity and specificity of T21 using NIPT, a meta-analysis using data from 32 studies were used. Calculations were performed for 10 000 pregnancies with an average age of the women at 30 years, tested in week 12, and with an average risk of having trisomy 21 (1:526). The price of NIPT was set to €542 (no price is yet available in Sweden). Costs and quality of life related to living with T21 were not included. RESULTS: Using NIPT as a first line procedure increases the costs from about €2 M more than €1 M and its cost-effectiveness ratio becomes about €2 M per extra true detected T21 compared to the combined test. Using NIPT as a second line procedure (following the combined test with a cut-off risk at 1:200) leads to reduced costs and fewer procedure-related miscarriages, but with 0.04 fewer T21 detected. CONCLUSIONS: The use of NIPT to test for T21 increases the cost-effectiveness, but it is not possible to clarify what testing strategy (if any) that would be considered cost-effective.

PMD46 ESTIMATING THE ADDITIONAL INDIRECT COST SAVINGS OF A PROBIOTIC ALGAE IN ADULT ICU PATIENTS WITH SEPSIS, AS ACHIEVED THROUGH REDUCTION IN ANTIBIOTIC RESISTANCE AND C. DIFFICILE INFECTIONS

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OBJECTIVE: Probiotic algae (PCT) is a specific marker for differentiating bacterial from non-infective causes of inflammation that was recently proven cost-effective