ABSTRACTS

ISPOR 3RD LATIN AMERICA CONFERENCE RESEARCH ABSTRACTS

PODIUM SESSION I: CARDIOVASCULAR DISORDERS OUTCOMES RESEARCH

CV1
A COST-UTILITY ANALYSIS OF PROPHYLACTIC THERAPY FOR VENOUS THROMBOEMBOLISM WITH DABIGATRAN ETIXILATE OR ENOXAPARIN
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OBJECTIVES: To conduct a cost-utility evaluation of dabigatran etixilate compared with enoxaparin for the prevention of venous thromboembolism (VTE) after total knee replacement (TKR) and total hip replacement (THR) in Colombia. METHODS: An acute phase model, using decision analysis, and a long-term simulation Markov model were developed to compare the clinical outcomes, utilities, and direct medical costs of dabigatran 220 mg once daily and subcutaneous enoxaparin 40 mg once daily for VTE prophylaxis after TKR or THR. Time frame for the acute attendant phase was 14 days for TKR and 30 days for THR, adjustments for adverse events and average length of hospital stay were performed. The long-term simulation was performed using Markov chain, with patient states defined by having up to eight infarct stents for both TKR and THR. Transition probabilities for VTE and bleeding events were derived from Phase III studies comparing the two treatments. The probabilities of long-term events were estimated using data from published longitudinal studies. The probabilities of death at each time period were estimated. Sensitivity analyses were performed to assess the model robustness. The annual discount rate was set at 3%. RESULTS: During the acute phase, for TKR, patients with dabigatran had lower direct medical costs than enoxaparin (USD $1,055.83 vs. USD $1,392.25), with 0.1 fewer QALYs at 1 year. In THR, cost of dabigatran was USD $868.73, and USD $1,007.55 for enoxaparin; no differences in QALYs were calculated. In the long-term follow-up, for both procedures, the costs associated with dabigatran were USD $115,433, compared to USD $122,695 for enoxaparin, with differences in QALYs 114.82% for THR, with no differences in QALYs were calculated. The analysis was robust to different determinants of costs and utilities, and enoxaparin was lower than dabigatran, for the overall population and different subgroups, with no differences in QALYs. CONCLUSIONS: In Colombia, thromboprophylaxis with dabigatran was cost-saving compared with enoxaparin in patients undergoing major joint replacement.

CV2
COST-EFFECTIVENESS OF PRASUGREL VERSUS CLOPIDOGREL IN PATIENTS WITH ACUTE CORONARY SYNDROMES UNDERGOING PERCUTANEOUS CORONARY INTERVENTION IN THE PRIVATE SECTOR IN MÉXICO
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OBJECTIVES: To evaluate the cost-effectiveness of prasugrel versus clopidogrel in patients with acute coronary syndromes (ACS) undergoing percutaneous coronary intervention (PCI) from the private healthcare payer perspective in Mexico. METHODS: The alternatives were prasugrel (loading dose 60 mg, maintenance dose 10 mg daily) versus clopidogrel (loading dose 300 mg, maintenance dose 75 mg daily). A Markov model was developed. Only direct medical care costs were considered. Costs and the model were validated by experts. RESULTS: The payer perspective for a lifetime horizon was used. Sensitivity analyses were performed to assess the model robustness. The annual discount rate was set at 3%. The results varied considerably depending on the cohort and the number of ACS types of populations evaluated over a 12 month time horizon. The number of events, death from cardiovascular causes, nonfatal myocardial infarction and nonfatal stroke, and stent thrombosis reported in the trial directly comparing prasugrel and clopidogrel (TRITON TIMI-38). Three types of populations were evaluated separately; overall, patients with diabetes mellitus and the subset of diabetics treated with insulin. Care costs were derived from medical records, and the costs of drugs were assumed to be the same. The costs and the model were validated by experts. RESULTS: According to the model, patients treated with prasugrel had fewer events in the three types of populations evaluated over a 12 month time horizon. The number of events, death from cardiovascular causes, nonfatal myocardial infarction and nonfatal stroke, and stent thrombosis avoided by 10,000 patients were distributed as follows: overall, 1,041 and 496. The average cost per patient (2010 Mexican pesos) treated with prasugrel was lower compared with clopidogrel, for the overall population and different subgroups, with no differences in QALYs. CONCLUSIONS: The results from the present analysis suggest that the use of prasugrel (instead of clopidogrel) in patients with ACS undergoing PCI, represents a more effective strategy at a lower cost (dominant strategy), a cost-saving alternative for institutions of private healthcare in Mexico.

CV3
ANÁLISIS DE COSTO EFECTIVIDAD EN EL CIERRE DE LA COMUNICACIÓN INTERSTIAL OSTUM SECUNDUM: TÉCNICA PERCUTANEA VERSUS QUIRÚRGICA
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OBJECTIVOS: La comunicación interstial (CIA) es la segunda cardiopatía congénita en la infancia y la tercera en el adulto. Realizamos un análisis costo-efectividad del cierre de la CIA con Técnica Percutanea (TP) con oclusor Amplatz septal occluder ASO عدم vs Técnica Quirúrgica (TQ), desde la perspectiva del proveedor de servicios de salud. METODOLOGÍAS: Mediante una cohorte prospectiva de pacientes con CIA atendidos en un hospital de tercer nivel del Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (ISSSTE), se identificaron y compararon los costos y efectividades del cierre con TP y con TQ, en ocho meses de seguimiento. La medida de efectividad fue el éxito clínico en el cierre sin complicaciones mayores al final del seguimiento (ECSM). Se estimó el costo promedio por paciente y rango intercuartílico, mediante la identificación y cuantificación de los recursos utilizados durante el seguimiento. Los costos unitarios se obtuvieron de las bases de datos de la institución. Los costos se expresaron en pesos mexicanos del 2010. Se definió un valor de p < 0.05 como estadísticamente significativo y se utilizan las pruebas Re U de Mann Whitney y Chi cuadrada. RESULTADOS: Entre enero de 2008 y Diciembre de 2009 se estudiaron 89 pacientes con CIA, Un total de 51 fueron tratados con TP y 38 con TQ, la ECSM con TQ fue 69% vs. 94% con TP (p<0.05). El costo promedio por paciente en el grupo de TQ fue $137,495.16 ($108,418.10-$146,661.60) vs. $99,850.96 ($99,746.50-$102,008.90) con TP (p<0.05). El costo por paciente con ECSM con TQ fue $225,395.34 vs. $109,509.72 con TP. El costo-efectividad incremental del tratamiento con TP vs TQ es de $124,719.03. CONCLUSIONES: El cierre de la CIA, en una institución de seguridad social mexicana mediante TP es costo-ahorradora al compararse con la TQ, información que debe ser considerada por los tomadores de decisiones.

CV4
COST-EFFECTIVENESS OF IMPLANTABLE CARDIOVERTER-DEFIBRILLATOR IN PATIENTS WITH RISK FACTORS FOR SUDDEN DEATH IN ARGENTINA
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OBJECTIVES: To evaluate the cost-effectiveness and cost-utility of the implantable cardioverter-defibrillator (ICD) among patients who are at risk for sudden death in Argentina, from three insurance categories: public health, social security and private. METHODS: We developed a Markov model to evaluate the survival, quality of life and cost of the prophylactic implantation of an ICD, as compared with pharmacological therapy, among three different target populations defined using clinical trials selected through a systematic review. We measured effectiveness, resource use and cost parameters. A healthcare system perspective was adopted and a 3% discount rate was used. RESULTS: The use of an ICD was more costly but more effective than control therapy. The cohort with the greatest benefits was represented by the MADIT I study showing an incremental cost effectiveness rate (ICER) of $8,539 (dollar 2009) for public, $9,371 for social security and $10,083 for private sector. ICERs for MADIT II population were $17,379, $18,574 and $19,799, respectively. The secondary prevention cohort showed the worst results with ICERs of $21,016, $22,520 and $24,012. The analysis was robust to different determinants and probabilistic sensitivity analyses, except for the cost of ICD and for battery life. CONCLUSIONS: The results varied considerably depending on the cohort and discretely according to the health system. ICD could be cost-effective in Argentina, mainly in the MADIT I patients.

PODIUM SESSION I: HEALTH CARE EXPENDITURE OR REIMBURSEMENT STUDIES

EX2
HEALTH CARE RESOURCE USE AMONG PATIENTS WITH BIPOLAR DISORDER FROM BRAZIL AND VENEZUELA: SUBGROUP ANALYSIS OF DATA FROM A LARGE MULTINATIONAL LONGITUDINAL STUDY (WAVE-BD STUDY)
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