effective as enoxaparin and cost-saving for the prevention of venous thromboembolism after total knee replacement under the Brazilian public health care system perspective.

PCV16

COST-EFFECTIVENESS ANALYSIS OF THROMBOLYSIS WITH RECOMBINANT TISSUE PLASMINOGEN ACTIVATOR (ALTEPLASE) FOR ACUTE ISCHEMIC STROKE UNDER THE BRAZILIAN PUBLIC HEALTH CARE SYSTEM PERSPECTIVE

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OBJECTIVES: To perform a cost-effectiveness analysis of thrombolysis with alteplase within 3 hours after acute ischemic stroke versus conservative treatment under the Brazilian public health care system perspective. **METHODS:** A Markov model was developed simulating acute stroke treatment with conservative treatment or alteplase. Three-monthly cycles were considered, during which, patients might transit between five post-stroke disability states, based on the modified Rankin Scale. The probability of presenting intracerebral hemorrhage after alteplase treatment and transition probabilities in the first year were obtained from NINDS trial. For subsequent years, 1-year cycles were considered, to account for patients' mortality. The outcomes were expressed as life years gained (LYG). Both direct costs and indirect costs were considered in the analysis. Costs and outcomes were discounted at 5% per year. Results were segmented by gender and calculated for different time horizons, ranging from 1 to 30 years. Unit costs for drugs were obtained from the Brazilian Health Prices Database, hospitalization and procedure costs were extracted from the National Database of Hospital Costs (SIH/DATASUS). **RESULTS:** In one year, incremental LYG were 0.0324 for both genders, with incremental costs of BRL608 for men and BRL363 for women. The incremental cost-effectiveness ratio in 1 year was BRL18,765/LYG (US$13,404) for men and BRL11,204/LYG (US$8,003) for women. After the second year, alteplase became cost-saving. The shorter length of hospitalization and reductions in rehabilitation needs and productivity losses overweighed incremental drug costs. (2005 PPP 1USD = 1.4BRL). **CONCLUSIONS:** Thrombolytic therapy with alteplase in the first three hours after stroke changes the natural history of disease, reducing both direct and indirect costs. In the long term, there are large scale resource savings for the Brazilian public health care system.

PCV17

COST EFFECTIVENESS ANALYSIS OF ROSUVASTATIN 10 MG VS. ATORVASTATIN 20 MG FOR THE TREATMENT OF HYPERCHOLESTEROLEMIA

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OBJECTIVES: Make a comparison between Atorvastatin 20 mg and Rosuvastatin 10 mg in the treatment of hypercholesterolemia in the Mexican public institutions. **METHODS:** We performed a cost-effectiveness analysis comparing Atorvastatin 20 mg with Rosuvastatin 10 mg. The effectiveness outputs were percentage of Low Density Lipoprotein Cholesterol (LDL-C) reduction and percentage of patients that achieve ATPIII goals after one-year treatment. Effectiveness variables were based on the results of the STELLAR study and costs were obtained from a local wholesaler (NADRO) prices list. We used the National Health and Nutrition Survey (ENSANUT) of 2006 to gather general prevalence information. Results are reported in U.S. dollars with and exchange rate of 15 MXN per dollar. **RESULTS:** Annual treatment cost of Rosuvastatin 10 mg was $558.04 and Atorvastatin 20 mg was $1,169.24. We found an annual difference of $611.2 per patient. This means that if all the population with hypercholesterolemia reported by the ENSANUT 2006 were treated with Rosuvastatin instead of Atorvastatin a total of $10,613 million would be saved by the payer. The cost of one patient achieving the ATPIII goal with Rosuvastatin was $680.13 while with Atorvastatin the cost was $1,565.88. Cost of 1% reduction of LDL-C was $12.18 for Rosuvastatin and $27.45 for Atorvastatin. **CONCLUSIONS:** Rosuvastatin 10 mg is more effective in both measurements (achieving ATPIII goals and reducing LDL-C) and is less costly than Atorvastatin 20 mg, therefore dominates over the compared treatment. The use of Rosuvastatin 10 mg instead of Atorvastatin 20 mg translates in huge saving to the public institutions in Mexico.

PCV18

COSTO-EFECTIVIDAD DE ETEXILATO DE DABIGATRAN EN LA PROFILAXIS DE LA ENFERMEDAD TROMBOEMBOLICA VENOSA (ETV) ASOCIADA CON CIRUGIA DE CADERA EN EL PACIENTE ADULTO EN EL INSTITUTO MEXICANO DEL SEGURO SOCIAL (IMSS)

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OBJECTIVOS: En México se estima que existen ≥100 mil casos nuevos detectados/año de trombosis venosa profunda (TVP) que originan >500,000 días/hospitalización y que la tromboembolia pulmonar (TEP) tiene una mortalidad intra-hospitalaria cercana al 47%. El objetivo de este trabajo fue identificar la alternativa más costo-efectiva para la profilaxis de la ETV desde la perspectiva del IMSS. **METODOLOGÍAS:** Evaluación económica completa. Se construyó un árbol de decisiones comparando los resultados en salud (estimados mediante meta-análisis) de tres alternativas anticoagulantes actualmente disponibles en el IMSS (heparina más warfarina, enoxaparina y fondaparinux) y los costos de la atención en el contexto de esa institución, versus los resultados y costos alcanzados por el uso del innovador dabigatrán. **RESULTADOS:** El esquema profiláctico basado en heparina no fraccionada más warfarina fue tomado como comparador común por ser el de menor precio y uno de los más empleados. Dabigatrán resultó ser la alternativa dominante en la profilaxis de TVP con una ICER de -$62.64 (IC95% $61.71–$63.57) por caso evitado. Lo mismo sucedió en el caso de TEP donde la ICER fue de -$1,002.28 (IC 95% $987.39–$1017.17) por caso evitado. Un análisis de sensibilidad multivariado confirmó estos resultados. **CONCLUSIONES:** Debido a que dabigatrán es un medicamento oral, de dosis fija y de efecto predecible, facilita un mayor apego al esquema profiláctico en comparación con el esquema comparador y con ello disminuye el riesgo de TVP o de TEP. Dabigatrán es la opción más eficiente para prevenir estos eventos en el contexto del IMSS.

PCV19

REVISÃO SISTEMÁTICA DE ESTUDOS DE CUSTO-EFETIVIDADE DA ROSUVASTATINA VS. ATORVASTATINA

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OBJETIVOS: Este estudo visa avaliar os estudos de custo–efetividade da Rosuvastatina versus a Atorvastatina no tratamento da hipercolesterolemia e avaliar a necessidade de incorporá-la no Brasil, pela listagem de Medicamentos Especiais para dislipidemias do Sistema Único de Saúde (SUS). **MÉTODOS:** Foi realizada uma busca nas bases de dados PubMed, Medline, Google Acadêmico, Bireme, Biblioteca do Centro Cochrane do Brasil, The Cochrane Library Clinical Evidence e Biblioteca do Conhecimento, de todos os estudos de custo–efetividade e Revisões Sistemáticas que avaliam a Rosuvastatina versus a Atorvastatina. Foram analisadas as populações envolvidas, a perspectiva do estudo, intervalo temporal, dados do estudo, medidas de efetividade, custos avaliados, modelagem econômico, taxas de desconto, análise de sensibilidade, limitações, conflitos de interesse, resultados principais. **RESULTADOS:** A Rosuvastatina, em diferentes dosagens, demonstrou em todos os estudos analisados ser mais custo–efetiva entre todas as estatinas comparadas, inclusive quando analisada com a Atorvastatina em relação à segurança, eficácia e custo–efetividade. Em pacientes de alto-risco com hipercolesterolemia, a Rosuvastatina foi o medicamento que reduziu mais significativamente os níveis de LDL e os custos de tratamento foram menores, diminuiu a quantidade de pacientes que realizaram novas consultas médicas necessitando aumentar a dose do medicamento, bem como o número de exames laboratoriais. **CONCLUSÕES:** A rosuvastatina tem poucos estudos que a avaliem frente a outras estatinas. É necessário que estudos no Brasil sejam realizados, sem conflitos de interesse, para avaliar mais profundamente a rosuvastatina. A rosuvastatina é efetiva, tem preços de venda mais baixos que a Atorvastatina podendo ser custo–efetivo incorporá-la na Lista dos Medicamentos Especiais do SUS, para pacientes com hipercolesterolemia e risco alto para doenças cardiovasculares. Para pacientes com baixo risco e que necessitar menor redução de LDL-C poderão ser utilizadas estatinas que tenham menor custo e menor efetividade.

CARDIOVASCULAR DISORDERS – Patient-Reported Outcomes Studies

PCV20

METABOLIC SYNDROME PATIENT COMPLIANCE WITH DRUG AND NON-DRUG TREATMENT

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OBJECTIVES: To evaluate compliance with drug treatment in patients with metabolic syndrome as well as weight loss and physical activity practicing during a 12-month follow-up. **METHODS:** This was a longitudinal study, with a 12-month follow-up, involving 45 patients with metabolic syndrome according to IDF criteria, who were being treated in a Health-Medical School Center under the Brazilian Healthcare System. Patients were evaluated every three months. The Measure Treatment Adherence, a variation of the Morisky-Green Test, in a 1 to 6 scale, was used to assess patient behavior patterns associated with the use of medicines. Parameters to evaluate compliance with non-drug treatment were: to achieve a 10% weight reduction in total body weight and to perform a minimum of 30 minutes of physical activity at least three times a week. **RESULTS:** Average levels of compliance in each measurement were: 5.49 ± 0.44 (at inclusion); 5.68 ± 0.57 (3-month follow-up); 5.87 ± 0.28 (6-month follow-up); 5.79 ± 0.44 (9-month follow-up); 5.72 ± 0.46 (12-month follow-up). At the end of 12-month period, 4 patient achieved weight reduction goal. Average % weight variations in relation to the established goal were: ↑10.2% ± 2.9 (3-month follow-up); ↑10.0% ± 6.5 (6-month follow-up); ↑10.1% ± 7.2 (9-month follow-up); ↑10.5% ± 7.5 (12-month follow-up). Patients who practiced no physical activity were: 62% (at inclusion); 60% (3-month follow-up); 64% (6-month follow-up); 69% (9-month follow-up); 69% (12-month follow-up). The majority of patients who practiced physical activities spent more than 30 minutes per exercise session. **CONCLUSIONS:** Patients involved in this study exhibited a high level of compliance with drug treatment. More research is needed to confirm if this result is characteristic of patients treated in a Health-Medical School Center. Although regular practice of physical activity and weight loss are associated with significant clinical improvements, both these issues need to be better addressed.