

The clinical benefit of stapled anastomosis creation of right colon resection surgery is expected to be accompanied by a strong potential economic benefit – as estimated for hospitals in Brazil.

PCN14

IMPACTO ECONÓMICO DEL USO DE VISMODEGIB EN EL TRATAMIENTO DE PACIENTES CON CARCINOMA BASOCELULAR LOCALMENTE AVANZADO EN VENEZUELA

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OBJETIVOS: estimar el costo por año de vida y años de vida ajustados por calidad en pacientes con carcinoma basocelular localmente avanzado, tratados con vismodegib frente a tratarlos con radioterapia secundaria. **METODOLOGÍAS:** se diseñó un modelo de Markov, con un horizonte temporal hasta la muerte, bajo ciclos semanales, que simula la historia natural de pacientes adultos con carcinoma basocelular localmente avanzado, inapropiados para cirugía. Se utilizaron tres estados de salud: libres de progresión, progresión y muerte; utilizando réplicas de curvas de eventos de Kaplan-Meier, tanto para progresión como para sobrevida. Las probabilidades requeridas para la estimación del modelo fueron estimadas de los estudios ERIVANCE y STEVIE. Como desenlaces se utilizaron los años de vida ajustados por calidad y costos totales. Los costos de servicios fueron extraídos de bases de datos venezolanas, mientras que los de medicamentos fueron estimados con fuente del Ministerio del Poder Popular para la Salud. Además, se utilizó una tasa de descuento del 5% para costos y resultados. Por último, se realizó un análisis de sensibilidad tipo Montecarlo. **RESULTADOS:** los años de vida, los años ajustados por calidad y el costo medio (en bolívares fuertes) de un paciente localmente avanzado, tratado con vismodegib fue de 6,55, 4,77 y \$1.210.554 respectivamente, mientras que con radioterapia fue de 6,44, 4,45 y \$628.908. Por ende, vismodegib tiene una mejor eficacia, lo cual se refleja en más del 86% de las iteraciones en el análisis de sensibilidad. **CONCLUSIONES:** vismodegib es dominante frente a radioterapia secundaria en eficacia, bajo el desenlace de años de vida ajustados por calidad. Su costo medio de uso anual es de \$184.636, lo cual representa un impacto bajo, dada una prevalencia baja de 3,3 por 100.000 y solo del 5% en estadios avanzados.

PCN15

BUDGET IMPACT ANALYSIS OF CARFILZOMIB FOR THE TREATMENT OF RELAPSED REFRACTORY MULTIPLE MYELOMA (MM) IN MEXICO

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OBJECTIVES: Multiple Myeloma (MM) is a hematological malignancy characterized by skeletal destruction, renal failure, anemia and hypercalcemia. Only 4 to 5% of the patients experience a survival of more than 10 years. The incidence reported worldwide was 114,251 new cases per year, with 1.5 cases per 100,000 residents. Given its low incidence, MM is considered orphan disease. The objective of the study is to estimate the budget impact to the Mexican public healthcare system when introducing Carfilzomib in the treatment of patients with refractory and relapsed MM who have received at least two previous treatments, including bortezomib and an immunomodulating agent. **METHODS:** A budget impact analysis was conducted using a 3 health states Markov model (progression-free, post-progression and death) with monthly cycle length. The budget impact of Carfilzomib was compared to the current standard treatment in Mexico (high-dose dexamethasone), while low-dose dexamethasone was assumed after progression, according to Mexican KOLs advice. The eligible population was based on the incidence rate (3/100,000) for MM in Mexico and an estimate of the percentage of relapsed and refractory patients from the literature. Only direct medical costs were accounted for drugs, procedures, laboratory tests and adverse events management. Costs were expressed in US dollars (Exchange rate \$15.16/USD) **RESULTS:** After introducing Carfilzomib, incremental budget impact in the first 5 years was estimated to have an average budget increase of 0.0033%. **CONCLUSIONS:** Assuming an increasing uptake of 5% per year, introducing Carfilzomib to the Mexican public healthcare system would on average increase budget by 0.0033%, being affordable in terms of funding and representing an effective and safe new therapeutic option for patients with relapsed and refractory MM.

PCN16

ESTIMATING THE BUDGET IMPACT OF SWITCHING FROM BORTEZOMIB INTRAVENOUS (IV) TO BORTEZOMIB SUBCUTANEOUS (SQ) IN THE TREATMENT OF RELAPSED/REFRACTORY MULTIPLE MYELOMA (MM) IN MEXICO

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OBJECTIVES: To conduct an exploratory analysis on the budgetary impact of migration from bortezomib IV to bortezomib SQ for the treatment of adults with relapsed/refractory MM in Mexico. **METHODS:** A budget impact model was developed using Microsoft Excel 2007® from the Mexican public payer perspective. Interviews with three clinicians (IMSS, INCAN, ISSSTE) currently treating relapsed/refractory MM patients were used to derive inputs for market shares, market basket comparators, grade 3 and 4 adverse event (AE) management (anemia, thrombocytopenia, peripheral neuropathy, neutropenia, fatigue, pneumonia and infection) and practice patterns for drug administration. Treatment dosing and AE rates were based on a clinical trial comparing bortezomib SQ and bortezomib IV. Unit costs for healthcare resources and drugs reflect published IMSS rates (2015 Mexican pesos). Cost of treatment is combined with literature-based estimates for the adult prevalence of MM (0.0018%), population covered by public institutions (39%), cases that are relapsed/refractory (52%), and likelihood of bortezomib IV treatment (10%) to estimate annual costs for this population. **RESULTS:** The annual per-patient treatment cost for bortezomib IV was \$653,136, including \$495,486 in drug costs, \$148,864 in

administration costs and \$8,786 in AE costs. The cost per-patient for bortezomib SQ was \$532,877, including \$495,513 in drug costs, \$30,906 in administration costs and \$6,458 in AE costs. The model estimates that 10% of MM patients covered by public institutions are using bortezomib IV. If these patients switched to bortezomib SQ, total savings to a payer would be \$3,803,850 (\$120,258/patient, 18.4%), including \$3,731,088 (\$117,958/patient) in administration and \$73,626 (\$2,328/patient) in AE cost savings. **CONCLUSIONS:** The use of bortezomib SQ instead of IV could provide access to a highly efficacious therapy while conferring savings to Mexican public payers. Given non-inferior efficacy, migration from IV to SQ bortezomib results in improved tolerability and reduced administration requirements without reducing clinical benefits from treatment.

PCN17

A BUDGET IMPACT MODEL ESTIMATING THE FINANCIAL IMPACT OF INCREASED USE OF GENERIC BORTEZOMIB INTRAVENOUS (IV) IN THE TREATMENT OF RELAPSED/REFRACTORY MULTIPLE MYELOMA (MM) IN VENEZUELA

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OBJECTIVES: Given the recent launch of generic bortezomib IV, payers may look to increase utilization of bortezomib IV to contain costs for the treatment of adults with relapsed/refractory MM in Venezuela. Prior to the introduction of bortezomib subcutaneous (SQ), bortezomib IV was the standard of care. This study evaluates the fiscal impact of increased use of generic bortezomib IV on total treatment costs. **METHODS:** A budget impact model was developed from the Venezuelan public payer perspective. Resource costs were based on local provider interviews (2014 Venezuelan bolívares). Treatment dosing and AE rates were based on clinical trials. Inputs for market basket comparators, adverse event (AE) management and drug administration were estimated via three clinician interviews. Generic bortezomib IV was assumed to be priced at 30% of the price of bortezomib SQ and market adoption was based on manufacturer projections, assuming equi-proportional migration from all comparators (combinations including lenalidomide, thalidomide, melphalan and dexamethasone), except bortezomib SQ, which is constant. Cost of treatment is combined with literature-based estimates for the adult prevalence of MM (0.0018%), cases that are relapsed/refractory (52%), and likelihood of treatment (100%) to estimate annual costs for the full population. **RESULTS:** The cost of treating 270 incident patients under current market shares is estimated at \$27,699,084 (\$102,510/patient). Assuming a 20% market share adoption of generic bortezomib IV, annual costs would increase by 26.2% to \$34,944,197 (\$129,323/patient), driven by the increased utilization of bortezomib IV (\$20,155/patient) relative to other regimens and increases in administration (\$4,562/patient) and AE costs (\$2,096/patient). **CONCLUSIONS:** Increased utilization of generic bortezomib IV is not likely to translate into cost savings for the Venezuelan public payer given increased drug, AE and administration costs. Another option for lowering costs may be to promote the use of newer treatment alternatives that provide both high efficacy and favorable AE and administration profiles.

PCN18

IMPACT OF INDISCRIMINATE USE OF PUMP INFUSION SET (PIS) ON THE COST OF CHEMOTHERAPY TREATMENTS: A COST MINIMIZATION STUDY

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OBJECTIVES: Cancer incidence has increased in last decades. Meanwhile, new and costly intravenous chemotherapy drugs (CT) are added to current treatment options. Cost of chemotherapy is not restricted to drugs themselves, and some of the equipment used for infusion can impact the final value. CT can be administered on simple IV lines although some require the use of pumps infusion sets (PIS) both of which may be PVC free or photosensitive depending on the drug. Nonetheless, several cancer centers in Brazil adopt CT pump infusion as a rule, despite manufacturers instructions. We aim to assess the added cost of unnecessary PIS use during CT infusion. **METHODS:** In this cost-minimization study we compared 2 scenarios: use of PIS according to manufacturer recommendations or as a rule for all CT. Chemotherapy treatments for breast cancer (AC-T, AC-TH, TAC, FAC, CMF and FEC100), lung cancer (carboplatin/paclitaxel with and without bevacizumab, vinorelbine/cisplatin, cisplatin/paclitaxel and pemetrexed/cisplatin) and colon cancer (fluorouracil/leucovorin, FOLFIRI, FOLFOX, cetuximab/irinotecan) were listed from the Brazilian Society of Clinical Oncology (SBOC) manual. Minimum, mean and maximal costs for drugs and equipment were retrieved from the official price list (SIMPRO), daily cost of infusion and increment in cost were also calculated in Brazilian Reals (R\$). **RESULTS:** Fifteen CT combinations were evaluated (6 for breast, 5 for colon and 4 for lung cancer). For breast cancer, the mean incremental cost per day of infusion with PIS varied from R\$ 994.35 to R\$ 1,839.54, depending on the chemotherapy scheme used. For lung cancer these values varied from R\$ 356.34 a R\$ 1,201.53 and for colon cancer treatment the incremental cost was R\$ 1,226.36. **CONCLUSIONS:** Although medications are the main source of expense in cancer treatment, unnecessary use of PIS can add considerable costs to chemotherapy and correct use according to manufacturer recommendation should be reinforced.

PCN19

THE COST-EFFECTIVENESS OF BENDAMUSTINE-RITUXIMAB (BEN-R) VERSUS R-CHOP FOR THE FIRST LINE TREATMENT OF PATIENTS WITH INDOLENT NON-HODGKIN'S LYMPHOMA (INHL) IN COLOMBIA

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