

PCN23
ANÁLISE FARMACOECONÔMICA DO TRATAMENTO DO CÂNCER COLORRETAL METASTÁTICO COM BEVACIZUMABE NO BRASILTonon LM¹, Secoli SR²¹Hospital Sírio Libanês, São Paulo, SP, Brazil, ²Universidade Federal de São Paulo, São Paulo, SP, Brazil

OBJETIVOS: Realizar análise custo-efetividade (ACE) das terapias antineoplásicas IFL (irinotecano, 5-fluorouracil e leucovorin) e o IFL + BV (IFL associado ao bevacizumabe) empregado no tratamento do câncer colorretal metastático em primeira linha no Brasil. **MÉTODOS:** Os custos foram estimados para a categoria de medicamentos, materiais e recursos humanos relacionados à execução da terapia. A efetividade dos protocolos foi medida pela proporção de pacientes livre do risco de progressão de doença. Os custos de materiais e medicamentos foram obtidos a partir da tabela de preços que regulamentam o mercado hospitalar. Os dados concernentes à efetividade foram obtidos através da literatura científica. Utilizou-se o modelo de análise de decisão para estimar o custo total da terapia antineoplásica. **RESULTADOS:** O protocolo IFL apresentou o menor custo por unidade de sucesso (R\$171,300.00 por paciente livre de progressão de doença), enquanto o IFL + BVb mostrou-se com a pior relação custo-efetividade (R\$218,444.09 por paciente livre de progressão de doença) aos 10 meses de tratamento. A análise incremental apresentou um custo adicional semelhante aos 5 e 10 meses de tratamento, enquanto aos 15 meses foi de R\$ 3,622,402.50. A análise de sensibilidade mostrou que essa conclusão foi robusta. **CONCLUSÕES:** As análises apontaram melhor relação custo efetividade para o protocolo IFL. No entanto, o custo adicional do protocolo IFL+BVb foi proporcional até os 10 meses de tratamento.

PCN24
COST-EFFECTIVENESS ANALYSIS OF LAPATINIB ASSOCIATED TO CAPECITABINE VERSUS CAPECITABINE ALONE AND OF TRASTUZUMAB ASSOCIATED TO CAPECITABINE VERSUS CAPECITABINE ALONE IN THE TREATMENT OF METASTATIC BREAST CANCER UNDER THE BRAZILIAN PRIVATE HEALTH CARE SYSTEM PERSPECTIVETeich V¹, Passos RBF¹, Teich N¹, Canella M²¹MedInsight, Rio de Janeiro, Brazil, ²GlaxoSmithKline Brasil, Rio de Janeiro, RJ, Brazil

OBJECTIVES: To develop two separate cost-effectiveness analyses, evaluating costs and outcomes of lapatinib associated to capecitabine (LAP/CAP) versus capecitabine alone (CAP) or trastuzumab associated to capecitabine (TRAST/CAP) versus capecitabine alone in the treatment of HER2 positive, metastatic breast cancer patients, previously treated with trastuzumab, under the Brazilian private health care system perspective. **METHODS:** In the absence of a trial comparing directly treatments with LAP/CAP versus TRAST/CAP, two separate studies were identified, each evaluating the efficacy of the combination treatment versus capecitabine alone. Population severity and dosage of capecitabine in the combined arm differed between trials, so an indirect comparison was not possible. Therefore, two independent cost-effectiveness analyses were developed. Only direct medical costs were considered, including medications, follow-up, disease progression and treatment of adverse events. Outcomes were expressed as time-to-progression (TTP). Maximum Prices to Consumer were considered for drug costs and procedure costs were obtained from published tariffs. **RESULTS:** In one year, the analysis comparing LAP/CAP to CAP resulted in 7.01 progression free months for LAP/CAP and 5.74 to CAP. Average costs were BRL130,908 for LAP/CAP and BRL62,960 for CAP, resulting in an ICER of BRL53,484 per additional month without progression. In the same time horizon, the analysis comparing TRAST/CAP to CAP resulted in 7.86 progression free months for TRAST/CAP and 6.64 to CAP. Average costs were BRL179,522 for TRAST/CAP and BRL70,012 for CAP, resulting in an ICER of BRL89,852 (USD64,180) per additional month without progression. (2005 PPP index 1USD = 1.4BRL) **CONCLUSIONS:** Associating lapatinib to treatment with capecitabine leads to gains in time-to-progression of 1.27 months, with an average cost per additional month without progression of BRL53,484. In similar conditions, although evaluated in a different population, trastuzumab associated to capecitabine leads to 1.22 month gains in TTP with an average cost per additional month without progression of BRL89,852.

PCN25
REVISIÓN SISTEMÁTICA Y EVALUACIÓN ECONÓMICA DE LA ABLACIÓN POR RADIOFRECUENCIA EN TUMORES HEPÁTICOS

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OBJECTIVOS: Evaluar la efectividad, seguridad y eficiencia de la ablación por radiofrecuencia, comparada con la resección quirúrgica, en el tratamiento de pacientes con tumor primario de hígado. **METODOLOGÍAS:** Se realiza una revisión sistemática de la literatura, con búsqueda bibliográfica de estudios originales en las bases de datos Medline, Embase, Pascal Biomed y Cinahl a través de la plataforma OVID. Para determinar la efectividad y seguridad de la técnica se incluyeron estudios originales en pacientes tratados mediante ablación por radiofrecuencia, con controles tratados por resección quirúrgica, con o sin asignación aleatoria entre grupos. La evaluación económica se basa en un modelo analítico de decisión que incluye la información de efectividad y seguridad resultante de la revisión de la literatura y datos de costes del entorno sanitario español. **RESULTADOS:** De la revisión se obtiene un ensayo clínico aleatorio y otros ocho estudios sin asignación aleatoria, que presentan resultados comparando los dos procedimientos. El ensayo clínico aleatorio no encuentra diferencias estadísticamente significativas en cuanto a supervivencia total y supervivencia libre

de enfermedad. En total dos de los siete estudios que comparan supervivencia total encuentran diferencias estadísticamente significativas favorables al grupo de resección quirúrgica. En supervivencia libre de enfermedad tres de los siete estudios que la comparan presentan diferencias con significación estadística a favor de la resección. El resultado preliminar de la evaluación económica muestra una razón costo-efectividad incremental de 7624 euros por año de vida ganado de la resección frente a la ablación. Pero los resultados no se muestran muy robustos en el análisis de sensibilidad, viéndose especialmente afectados por la incertidumbre en efectividad. **CONCLUSIONES:** No hemos encontrado suficiente evidencia de alta calidad para establecer conclusiones definitivas en efectividad. La ablación por radiofrecuencia como tratamiento de tumores primarios de hígado no ha demostrado ser superior a la resección quirúrgica, considerada la técnica de elección.

PCN26
COST-EFFECTIVENESS AND COST-UTILITY ANALYSIS OF SUNITINIB VS SORAFENIB AND BEVACIZUMAB + INTERFERON-ALFA AS FIRST-LINE TREATMENT FOR METASTATIC RENAL CELL CARCINOMA IN MEXICOSalinas-Escudero G¹, Contreras-Hernandez I², Mould-Quevedo J³¹Hospital Infantil de México Federico Gómez, Mexico City, Mexico, ²Social Security Mexican Institute, Mexico City, Mexico, ³Pfizer Mexico, Mexico City, Mexico

OBJECTIVES: Metastatic renal cell carcinoma (mRCC) has been notoriously resistant to therapy. For decades, its treatment has been based on nephrectomy and limited use of toxic and often inefficient immunotherapy. However, new biologic agents are beginning to break the resistance barrier. The study aims to model the long-term economic and health consequences of current first-line treatments in adult patients with mRCC from the institutional perspective. **METHODS:** A cost-effectiveness and cost-utility analyses were developed using a stochastic Markov modeling approach. The model simulates treatment costs, progression free-years (PFY), life years gained (LYG) and Quality Adjusted Life Years (QALYs) gained in a five-year period among five possible health states (first-line treatment-no progression-, second-line treatment, palliative care, death due to mRCC and death due to other causes). The model compared in a six-week cycles: sunitinib 50 mg/day vs. sorafenib and bevacizumab+IFN-ALFA. Transition probabilities and utilities were obtained from previously published trials. Resource use and costs data was obtained from randomized hospital records at Hospital de Oncología CMN "Siglo XXI" in Mexico City (n = 80). Both costs and effectiveness were discounted using a 5% annual rate. Tornado Diagrams and probabilistic sensitivity analyses were performed. Acceptability curves were constructed. **RESULTS:** First-line treatment with sunitinib showed the highest PFY, LYG and QALYs (1.09 ± 0.14; 2.11 ± 0.41 and 1.38 ± 0.33 years) followed by bevacizumab + IFN-ALFA (0.92 ± 0.11; 2.06 ± 0.39 and 1.30 ± 0.34 years) and sorafenib (0.53 ± 0.11; 1.88 ± 0.35 and 1.14 ± 0.31 years). Expected health care costs for sunitinib in the five-year period resulted in US\$40,502 ± 4,349; bevacizumab + IFN-ALFA (US\$88,073 ± 9,583) and sorafenib (US\$40,885 ± 6,053). The ICER's per PFY, LYG and QALYs resulted negative indicating sunitinib dominance. Results were robust to second-order Monte Carlo sensitivity analysis (1,500 iterations). Acceptability curves showed that sunitinib would be a high cost-effectiveness strategy against sorafenib and bevacizumab + IFN-ALFA with a probability over 80% (p < 0.05) with a WTP < 3GDP. **CONCLUSIONS:** Sunitinib malate first-line treatment would be the most cost effective therapy among the new agents for patients with mRCC.

PCN27
COST MINIMIZATION ANALYSIS OF TEGAFUR-URACIL ASSOCIATED TO LEUCOVORIN (UFT/LV) VERSUS CAPECITABINE ALONE FOR METASTATIC COLORECTAL CANCER UNDER THE BRAZILIAN PUBLIC HEALTH CARE SYSTEM PERSPECTIVE

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OBJECTIVES: To perform a cost-minimization analysis comparing tegafur-uracil associated to leucovorin (UFT/LV) and capecitabine alone, in the treatment of metastatic colorectal cancer (MCRC), under the Brazilian public health care system perspective. **METHODS:** After a literature review, trials comparing directly UFT/LV to capecitabine in the treatment of MCRC were not identified. Therefore, an indirect comparison was performed, considering studies comparing UFT/LV to 5-fluorouracil associated to leucovorin (5-FU/LV) and capecitabine alone to 5-FU/LV. Capecitabine and UFT/LV showed equivalent efficacy to 5-FU/LV, while potentially avoiding the complications and inconvenience associated with intravenous regimens. Hence, equivalent efficacies between treatments with capecitabine alone and UFT/LV were assumed. Direct medical costs were estimated for both treatments, under the Brazilian public health care system perspective, in a 4 month time horizon. The treatment protocols used in the clinical trials were considered for the analysis, incorporating the possibility of having dose reductions or increases. Unit costs for drugs were obtained from a national Database of Healthcare Prices. The unit price considered for UFT was BRL 1,203.76, equivalent to the ex-factory price, excluding the percentage of price adaptation (24.92%), mandatory for sales of high cost drugs to public bodies. **RESULTS:** Total average costs in 4 months were equal to BRL5050 (US\$3607) for patients treated with UFT/LV and BRL8595 (US\$6139) for patients treated with capecitabine alone. Both adverse events treatment costs and drug costs were lower for UFT/LV. The economic advantage of UFT/LV was maintained varying the time horizon of the analysis, the average body surface of patients and considering a conservative dosage of capecitabine. (2005 purchasing power parity index 1USD = 1.4BRL) **CONCLUSIONS:** Considering UFT/LV as an equivalent therapy to capecitabine alone in terms

of efficacy and with lower treatment costs, a potential for resource savings for the health care system arises, without clinical benefits losses to patients.

PCN28

PHARMACOECONOMIC EVALUATION OF THE USE OF SOMATOSTATIN ANALOGS HANDLING THE ASSOCIATED SYMPTOMS OF CARCINOID SYNDROME

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OBJECTIVES: There is a group of neoplasia that secretes vasoactive peptides causing carcinoid syndrome. Surgical treatment is the election, however, if after surgery a residual tumor is maintained, the use of somatostatin analogs: lanreotide Autogel® and octreotide, is the treatment to follow. The objective of this research paper is to evaluate which of the somatostatin analogs is the most effective in the symptomatic control of carcinoid syndrome, associated with the lowest cost. **METHODS:** Cost minimization analysis from an institutional perspective was estimated, considering only direct medical costs for a one year temporary horizon, using a decision tree model. Univariate sensitivity and probability analysis was carried out for this purpose. Costs were estimated using prices of 2008 and are expressed in US dollars (exchange rate of 11.14 pesos/1 US dollar). **RESULTS:** According to the model, 41.3% of patients would achieve control of their symptomatology either with Lanreotide Autogel®, as with octreotide, when adjusting the reported efficacy in the literature by the survival rate of one year for this illness. Treatment with Lanreotide Autogel® implies the lowest average cost per patient with carcinoid syndrome: \$15,317.18 followed by the treatment with octreotide with a cost of \$19,231.42. Sensitivity analyses show that lanreotide would support the treatment with the lowest cost, which would make it the dominant treatment or at least the treatment above the efficiency line. **CONCLUSIONS:** Lanreotide Autogel® is the treatment that minimizes attention cost of carcinoid syndrome, from the institutional perspective within the Mexican context.

PCN29

REVISÃO DE CONTAS EM ONCOLOGIA E MEDICINA BASEADA EM EVIDÊNCIAS (MBE): IMPACTO FINANCEIRO E BUSCA PELA QUALIDADE

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OBJETIVOS: A busca por um controle mais preciso dos custos em saúde é uma realidade global. Nosso objetivo foi avaliar em termos financeiros o quanto de desperdícios em materiais e medicamentos pode ser detectado durante a revisão de contas de quimioterapia cujos procedimentos haviam sido previamente filtrados por uma auditoria baseada em evidências. **MÉTODOS:** As solicitações de quimioterapia dos prestadores de três grandes operadoras do estado de São Paulo no ano de 2008 foram auditadas por uma equipe de oncologistas com treinamento em MBE e classificadas de acordo com a melhor evidência científica disponível como aprovadas (de acordo com as evidências), negados (em desacordo com as evidências) ou pendentes (mais informações eram necessárias). Os tratamentos foram realizados e as contas geradas enviadas para análise pela equipe de enfermeiras auditoras (EA). Todas as inconsistências foram detectadas e quantificadas. **RESULTADOS:** Foram revisadas 1,815 contas de quimioterapia um total de cobrança de R\$ 5,149,226.12. Destas, a equipe de EA encontrou pontos de glosa em 1,198 (66%), o equivalente a R\$ 613,647.57 (11.9% do valor total). Entre os problemas encontrados estava a realização de tratamentos que haviam sido previamente negados. Detectou-se também a cobrança de quantidade de quimioterápicos superior ao autorizado, principalmente entre as drogas de alto custo, gerando abertura de novos frascos, aumento de custos e maior desperdício de drogas no meio-ambiente. Rotinas como a pesagem imediata do paciente antes do momento da quimioterapia como justificativa para o aumento da dose não tiveram embasamento encontrado na literatura. Excesso de materiais e autorização de guias com validade expirada também foram encontradas. **CONCLUSÕES:** A revisão de contas em oncologia pode gerar uma economia extra de quase 12% e uma ferramenta que pode potencializar a redução de custos proporcionada pela adesão de protocolos baseados em evidências e eliminação de tratamentos considerados experimentais.

CANCER – Patient-Reported Outcomes Studies

PCN30

IMPACTO EMOCIONAL EN UN GRUPO DE MUJERES MEXICANAS CON DIAGNÓSTICO DE VPH Y NEPLASIA INTRACERVICAL (NIC-II/III)

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OBJECTIVOS: Evaluar los factores psico-sociales y emocionales de un grupo de mujeres con diagnóstico de VPH y lesiones de alto grado cervical. **METODOLOGÍAS:** Veinte y cuatro pacientes con diagnóstico inicial de VPH y NIC II-III, fueron incluidas en un subestudio cualitativo, transversal y unicéntrico, paralelo a un ensayo fase II. Se les aplicó un cuestionario diseñado para explorar: el grado de conocimiento de la

enfermedad, el estado emocional empleando la Escala Visual Análoga (EVA) para medir rasgos de depresión y ansiedad; el impacto emocional en la relación de pareja y las expectativas de respuesta al tratamiento con el gel A-007. El test fue validado en las primeras diez pacientes. **RESULTADOS:** El 92% de las pacientes evaluadas refirieron estar preocupadas por su diagnóstico, a todas ellas les gustaría recibir información, de estas el 77% les gustaría ser informadas con todo detalle y el 15% solo sobre su tratamiento. Dentro del grupo de mujeres con un conocimiento adecuado de la enfermedad (VPH) el 56.5% presentaba rasgos de ansiedad y el 14% de depresión. Por otro lado, del 46% de pacientes que desconocían su enfermedad, el 32% presentaba rasgos de depresión y el 68% de ansiedad. El 58% de las mujeres respondió que no volvería a tener relaciones con su pareja aun después de haber recibido el tratamiento y el 31% presentó problemas con su pareja ante la noticia de VPH. El 100% tenía expectativa positiva al gel A00-7. **CONCLUSIONES:** El porcentaje de mujeres con rasgos de Depresión y Ansiedad fue significativamente mayor en el subgrupo de mujeres que desconocían la enfermedad. Los factores emocionales de las mujeres con VPH deberían ser adecuadamente atendidos e investigados en la práctica clínica.

PCN31

EL SENTIDO DE VIDA EN UN GRUPO DE MUJERES ACAPULQUEÑAS CON DIAGNÓSTICO DE CÁNCER

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OBJECTIVOS: Explorar el sentido de vida en un grupo de mujeres con diagnóstico de cáncer al inicio y al final de un taller logoterapéutico. **METODOLOGÍAS:** Estudio prospectivo, longitudinal comparativo en curso. El estudio involucro a 28 pacientes con cáncer de entre 40 y 72 años de edad, distribuidas en: un grupo control (n = 14), con pacientes que no participaron en el taller; y el experimental (n = 14). La percepción y el propósito del sentido de vida es evaluado con el instrumento Purpose in Life Test (PIL) aplicado al inicio y al final del taller. La parte A se evalúa de manera cuantitativa y la parte B consiste de 13 preguntas contestadas con lo primero que viene a su mente y en la parte C los pacientes son alentados a escribir oraciones acerca de sus aspiraciones y metas en la vida y luego interpretados clínicamente. **RESULTADOS:** Los resultados del PIL aplicado al inicio del taller, nos indican que el 50% de las pacientes tienen una percepción y propósito del sentido de vida, 42% presenta indefinición y 8% carencia del mismo. En la parte B y C el 100% refieren búsqueda de la felicidad, alcanzar sus metas, mantenerse con salud y miedo a la muerte. Los resultados al final del taller están en proceso. **CONCLUSIONES:** La presencia de sentido de vida en las pacientes con cáncer fue significativamente mayor en aquellas de larga evolución y supervivencia y frecuentemente manifestaban: deseo de recuperar su salud, preservar su vida, búsqueda de felicidad y objetivos. Por ende el tener un sentido para la vida es un requisito para la salud mental.

PCN32

QUALITY OF LIFE IN DIFFERENT STAGES OF MEXICAN BREAST CANCER PATIENTS

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OBJECTIVES: The aim of this study was to estimate the quality of life (QOL) of breast cancer patients in their different stages attended at a tertiary referral center at the Social Security Mexican Institute(IMSS). **METHODS:** Quality of life surveys for patients with breast cancer were recruited at the "Hospital de Especialidades" CMNO at IMSS, from July 2008 to February 2009 using the following inclusion criteria: women older than 16 years of age with a histological diagnosis of breast cancer who accepted to be included in the study through informed consent. Patients excluded were those who showed a second malignant neoplasm or incomplete information filling the survey. To evaluate QOL, the validated Spanish version of the EORTC QLQ-C30 was administered to patients. This questionnaire evaluates global health status, five functional domains (physical, role, emotional, cognitive and social), three symptom scales (fatigue, nausea and vomiting, pain), and six single items (dyspnea, insomnia, appetite loss, constipation, diarrhea, financial difficulties) on a scale from 0 to 100 (0 = death, 100 = perfect health). Estimations calculate means and range for EORTC QLQ-C30 score items and statistical differences were estimated through ANOVA tests; p value <0.05 was considered significant to show differences. **RESULTS:** We interviewed 79 breast cancer patients, mean age 51.68 ± 10 years old, 70% were married, and 20% had an educational level of preparatory. Patients were allocated according their clinical stages as follows: I-11%, II-43%, III-32%, IV-14%. Global Health Status scores found for each stage were: I:84.2, II:72.8, III:73.3, IV:71.9; p = 0.48. However, we obtained significant differences in several functional domains and symptoms: physical function(I-88, II-75, III-79, IV-56; p = 0.008), role function (I-90, II-71, III-81, IV-44; p = 0.001), fatigue (I-83, II-62, III-67, IV-44; p = 0.003) and pain (I-83, II-65, III-70, IV-50; p = 0.04). **CONCLUSIONS:** Significant differences were observed in Mexican breast cancer patient's symptoms among their clinical stages.