

PCN110

COST-MINIMIZATION ANALYSIS OF XELOX VERSUS FOLFOX ± BEVACIZUMAB FOR TREATMENT OF METASTATIC COLORECTAL CANCER (mCRC) IN SAUDI ARABIAN HOSPITAL SETTINGZazza AS¹, AlOmar H², El-Moursy SA³, Alfayyadh M²

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OBJECTIVES: To compare the total costs of XELOX (oral capecitabine + IV oxaliplatin) ± bevacizumab versus FOLFOX-4 (IV 5-FU/ folinic acid/ oxaliplatin) ± bevacizumab in the first line treatment for patients with metastatic colorectal cancer (mCRC) in Saudi Arabia from a health care provider and societal perspectives. **METHODS:** The analysis was based on a non-inferiority phase III clinical trial data done by Cassidy *et al.* in 2008. Direct medical and indirect costs were contrasted. Drug acquisition costs were estimated using published sources. Drug administration costs for each regimen and hospitalisation costs were calculated using values derived from a Saudi Arabian-specific survey and observation. Data taken directly from the trial and used in the analysis include treatment duration, adverse event frequency and central venous access management. Indirect costs derived from the time that the patient incurred in the chemotherapy administration process and the time consumed by travelling to the health care centre. **RESULTS:** Total direct medical cost estimates were considerably lower for 3-weekly XELOX compared with bi-weekly FOLFOX that resulted in savings equivalent to SR 42,660 (US\$ 11,346) per patient which were mainly due to lower drug administration costs. Correspondingly, total direct medical cost estimates were substantially lower for XELOX + bevacizumab compared with FOLFOX + bevacizumab by SR 55,236 (US\$ 14,690) per patient. The drug acquisition costs were higher for XELOX. However, this was offset by XELOX's reductions in other health care resources consumption such as the use of central venous access and other medications. Regarding indirect cost estimates, patient time and travel costs were lower for XELOX by SR 5815 (US\$ 1547) per patient due to fewer visits and cycles. **CONCLUSIONS:** XELOX ± bevacizumab is cost-saving in comparison to FOLFOX-4 ± bevacizumab from both health care provider and societal perspective in Saudi Arabia.

PCN111

COST MINIMIZATION ANALYSIS FOR STAPLED VERSUS HANDSEWN SURGERY TECHNIQUES FOR ANASTOMOSES IN SURGICAL TREATMENT FOR COLON CANCER, UNDER THE BRAZILIAN PUBLIC PAYER PERSPECTIVEBastide P¹, Nogueira EDM¹, Carone M²

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OBJECTIVES: Surgical treatment of colon cancer requires resection of the tumor mass and formation of anastomosis, such as a latero-lateral. Two common methods to construct an anastomosis are the use of staplers (SA) and hand suturing (HA) (MacRae, 1998; Lustosa, 2002). Our objective was to compare costs and resources for both surgery techniques to assess the potential cost-savings due to surgery time reduction, faster recovery and less complications by the adoption of staplers, under the public payer perspective, in Brazil. **METHODS:** A decision tree was developed to compare costs and resources for SA versus HA surgical techniques, based on Brazilian guidelines for HTA (Vianna, 2007). Similar efficacy was assumed based on CHOY, 2009, and a panel of specialists was conducted to obtain the local practice. Only direct medical costs (anesthesia drugs, physician fees, hospital length-of-stay (LOS) and materials) were considered based on public lists (SIMPRO, 2009; CBHPM 5th edition). One-month timeframe was considered, based on intra and post-operative periods; consequently a discount rate was not necessary. One-way sensitivity analyses were performed to assess the robustness of the results. **RESULTS:** Total costs were 1.5% higher for SA than HA (R\$7498 versus R\$7389), because of stapler's costs (R\$ 1,992 versus R\$ 39 for suture). However, SA technique allowed the reduction on operating room costs due to reduction of 2 hours on surgery (4 versus 6 hours), anesthesia drugs and oxygen (R\$ 4,009 versus R\$4574; 12% of reduction). The SA procedure, also, reduced the LOS (6 versus 8 days; R\$1481 versus R\$2715) and the complication costs with fistulas and intracavitary abscess (R\$15.19 versus R\$60.49). **CONCLUSIONS:** Findings suggest SA technique as a safety and effective choice for colon cancer surgeries, compared with HA, that can reduce use of resources that could offset stapler's costs, under Brazilian public payer perspective.

PCN112

COST MINIMIZATION ANALYSIS FOR STAPLED VERSUS HANDSEWN SURGERY TECHNIQUES FOR ANASTOMOSES IN SURGICAL TREATMENT FOR COLON CANCER, UNDER BRAZILIAN PRIVATE PAYER PERSPECTIVEBastide P¹, Nogueira EDM¹, Carone M²

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OBJECTIVES: Surgical treatment of colon cancer requires resection of the tumor mass and formation of anastomosis, such as a latero-lateral. Two common methods to construct an anastomosis are the use of staplers (SA) and hand suturing (HA) (MacRae, 1998; Lustosa, 2002). Our objective was to compare costs and resources for both surgery techniques to assess the potential cost-savings due to surgery time reduction, faster recovery and less complications by the adoption of staplers, under private payer perspective, in Brazil. **METHODS:** A decision tree was developed to compare costs and resources for SA versus HA surgical techniques, based on Brazilian

guidelines for HTA (Vianna, 2007). Similar efficacy was assumed based on CHOY, 2009, and a panel of specialists was conducted to obtain the local practice. Only direct medical costs (anesthesia drugs, physician fees, hospital length-of-stay (LOS) and materials) were considered based on public lists (SIMPRO, 2009; CBHPM 5th edition). One-month timeframe was considered, based on intra and post-operative periods; consequently a discount rate was not necessary. One-way sensitivity analyses were performed to assess the robustness of the results. **RESULTS:** Total costs were 8.5% higher for SA than HA (R\$8449 versus R\$7785), because of stapler's costs (R\$4246 versus R\$85 for suture). However, SA technique allowed the reduction on operating room costs due to reduction of 2 hours on surgery (4 versus 6 hours; 33% less time), anesthesia drugs and oxygen (R\$2316 versus R\$2875; 19% of reduction). The SA procedure, also, reduced the LOS (6 versus 8 days; R\$1872 versus R\$4768) and the complication costs with fistulas and intracavitary abscess (R\$14.29 versus R\$56.63). **CONCLUSIONS:** Findings suggest SA technique as a safety and effective choice for colon cancer surgeries, compared with HA, that can reduce use of resources that could offset stapler's costs, under Brazilian private payer.

PCN113

PHARMACOECONOMIC ANALYSIS OF CAPECITABINE PLUS OXALIPLATIN (XELOX) VERSUS 5-FLUOROURACIL/LEUCOVORIN PLUS OXALIPLATIN (FOLFOX) IN THE FIRST LINE TREATMENT OF METASTASIS COLORECTAL CANCER IN TAIWANChen HH¹, Chang CS², Chen LT³, Chen WT⁴, Hsu TC⁵, Wang JY⁶, Wen CY⁷

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OBJECTIVES: Colorectal cancer (CRC) is the second most commonly diagnosed cancer and the third cause of cancer-related mortality in Taiwan. Capecitabine (Xeloda[®]), an oral fluoropyrimidine, is an effective alternative to intravenous fluorouracil plus leucovorin (5-FU/LV) in treatment of metastasis colon cancer (mCRC). Recently, the addition of oxaliplatin to 5-FU/LV (FOLFOX) or capecitabine (XELOX) have been proven in significantly improving the progression free survival and overall survival compared with single agent. Based on the result of study NO16966 (Cassidy 2007), there is no difference in efficacy between XELOX and FOLFOX. The objective of this study was to develop a pharmacoeconomic model to estimate the medical resource utilization (MRU) of XELOX vs. FOLFOX as first line treatment of mCRC from the payer's [Bureau of National Health Insurance (BNHI)] perspective. **METHODS:** A cost-minimization model was constructed to represent the real MRU of XELOX and FOLFOX. Local treatment regimens and drugs administration patterns were based on the results of expert panel survey conducted among 13 colorectal surgeons and medical oncologists. Clinical outcomes and adverse events (AEs) incidence were referred to the result of study NO16966. Unit costs were estimated from BNHI fee schedules and local expert opinion. Sensitivity analyses were performed on key model parameters. **RESULTS:** The result showed drug cost was estimated to be higher in the XELOX (NTD\$259,618 vs. NTD\$204,442) by 6 months. However, these cost increments were offset by the drug administration cost and AEs management cost of FOLFOX. The drug administration cost and AEs management cost in the FOLFOX and XELOX were NTD\$119,285 vs. NTD\$24,090 and NTD\$14,414 vs. NTD\$7,155, respectively. FOLFOX regimen required more physician visits, drug infusion times and hospitalizations. As a result, XELOX demonstrated a significant overall cost savings of NTD\$47,277. **CONCLUSIONS:** From the perspective of Taiwan BNHI, this study showed that XELOX is cost-saving in comparison with FOLFOX in the first line treatment of mCRC.

PCN114

COST-EFFECTIVENESS ANALYSIS OF PEMETREXED/CISPLATIN IN THE FIRST-LINE TREATMENT OF NON-SMALL CELL LUNG CANCER IN ITALY: RESULTS FOR THE ADENOCARCINOMA HISTOLOGY SUB-POPULATIONGuidi L¹, Malik S², Valle D¹, Asukai Y², Taipale K³

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OBJECTIVES: To assess the cost-effectiveness of pemetrexed/cisplatin vs. gemcitabine/cisplatin in the first-line treatment of advanced or metastatic non-small cell lung cancer (NSCLC) patients with an adenocarcinoma tumour histology. **METHODS:** A Markov model developed to estimate the costs and benefits of pemetrexed/cisplatin vs. gemcitabine/cisplatin in the first-line treatment of NSCLC patients was populated with Italian unit cost data. As the incidence and prevalence of adenocarcinoma is higher than any other type of non-squamous NSCLC in Italy, the model focuses on patients with adenocarcinoma histology. The model consists of health states for stable disease, response, progressive disease and death. Patients receiving chemotherapy could also experience adverse events within the stable and response states. The clinical inputs (response rates, overall survival, progression-free survival and adverse event rates) were obtained from a phase III randomised trial comparing pemetrexed/cisplatin and gemcitabine/cisplatin. The analysis was from the Italian health care system perspective, with a 3-year horizon. Outcomes included direct medical costs (chemotherapy; adverse events; best supportive care; terminal/palliative care), life years gained (LYG) and quality-adjusted life years (QALYs), all discounted at a rate of 3%. **RESULTS:** Total LYG was 1.26 for patients treated with pemetrexed/cisplatin and 1.15 for patients treated with gemcitabine/cisplatin. Total QALYs were 0.67 for the