gained. RESULTS: Patients were categorized into SFUdLV (n = 2,834), oxaliplatin based (n = 621), and irinotecan based (n = 945) subgroups, based on the regimen they received. The median improvement in overall survival with SFUdLV, irinotecan or oxaliplatin based combination therapy was 1.25, 1.34, and 1.72 life-years, respectively. The incremental cost-effectiveness ratio of oxaliplatin based combination therapy was $67,637 per life-year gained. CONCLUSIONS: This analysis suggests that oxaliplatin or irinotecan based combination therapy improves overall survival but also substantially increases direct medical costs compared with SFUdLV when used in elderly US patients with stage IV colon cancer. Oxaliplatin-based regimens are more cost-effective than irinotecan based regimens.

THE COST-EFFECTIVENESS OF CETUXIMAB USE AMONG ELDERLY METASTATIC COLORECTAL CANCER PATIENTS
Wei DB, Lin CC
University of North Carolina at Chapel Hill, Chapel Hill, NC, USA
OBJECTIVES: The cost-effectiveness of cetuximab has been controversial mainly because of its marginal clinical benefits at very high medication cost. This study examines the cost-effectiveness of cetuximab versus best supportive care in the patients with metastatic colorectal cancer in US from the perspective of Medicare. METHODS: As modeled in a decision tree, three treatment options (cetuximab, cetuximab plus irinotecan, and best supportive care) are evaluated clinically and economically. Costs of cetuximab plus irinotecan options are largely determined by the treatment response, complete or partial response, stable disease, or progressive, and whether or not the patient experienced severe infusion reaction and/or severe adverse events. The primary outcome is quality-adjusted life expectancy. The treatment response rates and quality of life measurements are based on the results from clinical trials. Incremental cost-effectiveness ratios (ICER) between cetuximab treatments and best supportive care are presented to demonstrate the value of cetuximab treatments. Finally, sensitivity analyses are conducted to test the robustness of the results. RESULTS: In the patients with metastatic colorectal cancer, the incremental cost-effectiveness ratio for quality-adjusted life year (QALY) was $136,218 for cetuximab, and $318,609 for cetuximab plus irinotecan, in comparison to best supportive care. One-way sensitivity analyses showed that the cost of cetuximab had the highest impact on ICERS, compared to other costs and quality of life parameters. Probabilistic sensitivity analyses by Monte Carlo simulation demonstrated that best supportive care is more cost-effective than cetuximab treatments until the threshold of willingness to pay is raised up to $240,000. CONCLUSIONS: Our analyses suggest that cetuximab is not cost-effective, either in monotherapy or in combination with irinotecan, as the cost-effectiveness ratios are far beyond the accepted threshold of $50,000 per QALY gained. Cetuximab treatments need to be carefully evaluated before being delivered to metastatic colorectal cancer patients.

CETUXIMAB USE AMONG ELDERLY METASTATIC COLORECTAL CANCER PATIENTS
PCN61

THE COST-EFFECTIVENESS OF RADICAL PROSTATECTOMY VERSUS WATCHFUL WAITING FOR NON-SCREEN DETECTED PROSTATE CANCER: EXTRAPOLATING FROM THE SCANDINAVIAN TRIAL
Shrestha B A
Washington University School of Medicine, St. Louis, MO, USA
OBJECTIVES: The benefit of screening for and definitive treatment for prostate cancer has been questioned. Results from the Scandinavian study of radical prostatectomy comparing watchful waiting and surgery show a significant decrease in prostate cancer specific mortality, palliative treatment and overall survival. We evaluated the cost-effectiveness of radical prostatectomy compared to watchful waiting using data from the Scandinavian study protocol when extrapolated to the US. METHODS: We used the previously reported cost of care data for patients with prostate cancer based on the patterns of care observed in the CaPSURE database. The data from the Scandinavian trial, in accordance with the study protocol, was used to determine the costs and cost-effectiveness of radical prostatectomy for treatment of prostate cancer. The cost-effectiveness for radical prostatectomy was determined and was adjusted for the costs of androgen deprivation therapy as used in the Scandinavian trial. A model incorporating age at diagnosis, life expectancy and estimate of benefits from radical prostatectomy was created that predicts cost effectiveness of surgical intervention. Treatment with radical prostatectomy was cost-effective compared to watchful waiting for non-screen detected prostate cancer demonstrated decrease in prostate cancer specific mortality, palliative treatment and overall survival. Our analyses compared to watchful waiting for non-screen detected prostate cancer demonstrated that best supportive care is more cost-effective than cetuximab treatments as used in each study arm. Total cost included the procedure, pathology, drugs, 2 month follow-up visits, second- ary procedures, repairs or grafts and recurrences. Short Form (SF)-12 and Skindex scores at baseline and 2 years were mapped to the Health Utility Index (HUI) to adjust life expectancy and recurrence, our major outcomes. Cost per quality adjusted life year saved (QALY) was the final outcome. Sensitivity analysis tested uncertainty of model parameters. RESULTS: The all MMS strategy was most cost-effective when compared to mixed (ICER = $10,951/QALY) and all excision strategies (ICER = $6,722/QALY). The mixed strategy was cost-effective compared to the all excision strategy (ICER = $1,924/QALY). All excision was least costly ($168,100/patient) and all MMS was most costly ($183,10/patient). The all MMS strategy (17.2081 QALYS) was most effective compared to mixed (17.2032 QALYS) and all excision (17.1790 QALYS) strategies. The model is sensitive to the proportion of patients who receive MMS versus excision in the mixed strategy. The all MMS strategy no longer is cost-effective compared to the mixed strategy when the MMS proportion is decreased from 58.8% to 50% (ICER = $2,793,794) and at 45% the mixed strategy dominates all other strategies. Not until $900 is added to procedure cost of MMS does the all MMS strategy lose its cost-effectiveness. All MMS for NMSC is the most cost-effective strategy although the mixed strategy is preferred in some mixtures of patient populations. This analysis demonstrates that MMS is cost-effective if clinically indicated.

CETUXIMAB USE AMONG ELDERLY METASTATIC COLORECTAL CANCER PATIENTS
PCN62

CETUXIMAB USE AMONG ELDERLY METASTATIC COLORECTAL CANCER PATIENTS
PCN63

THE COST-EFFECTIVENESS OF MOHS MICROGRAPHIC SURGERY VERSUS SURGICAL EXCISION FOR THE TREATMENT OF NON-MELANOMA SKIN CANCER
Wilson L, Paul CJ, Baus R, Proguzer M, Jin M
University of California San Francisco, San Francisco, CA, USA, University of California Los Angeles Medical Center, Los Angeles, CA, USA
OBJECTIVES: Compare cost-effectiveness of three non-melanoma skin cancer (NMSC) strategies: all Mohs Micrographic Surgery (MMS), all surgical excision and mixed MMS and excision. METHODS: A decision-analytic model compared strategies using data from a prospective sample (n = 540) treated with MMS or excision at a university-affiliated dermatology clinic from 1999-2000. The newest (2007) Medicare reimbursement rules with tumor size, location and number of stages. MMS were adjusted for the costs of androgen deprivation therapy as used in each study arm. RESULTS: The all MMS strategy was most cost-effective when compared to mixed (ICER = $10,951/QALY) and all excision strategies (ICER = $6,722/QALY). The mixed strategy was cost-effective compared to the all excision strategy (ICER = $1,924/QALY). All excision was least costly ($168,100/patient) and all MMS was most costly ($183,10/patient). The all MMS strategy (17.2081 QALYS) was most effective compared to mixed (17.2032 QALYS) and all excision (17.1790 QALYS) strategies. The model is sensitive to the proportion of patients who receive MMS versus excision in the mixed strategy. The all MMS strategy no longer is cost-effective compared to the mixed strategy when the MMS proportion is decreased from 58.8% to 50% (ICER = $2,793,794) and at 45% the mixed strategy dominates all other strategies. Not until $900 is added to procedure cost of MMS does the all MMS strategy lose its cost-effectiveness. All MMS for NMSC is the most cost-effective strategy although the mixed strategy is preferred in some mixtures of patient populations. This analysis demonstrates that MMS is cost-effective if clinically indicated.

COST-EFFECTIVENESS ANALYSIS OF SORAFENIB VERSUS BEST SUPPORTIVE CARE (BSC) IN ADVANCED HEPATOCELLULAR CARCINOMA (AHCC): THE PUBLIC HEALTH CARE SYSTEM PERSPECTIVE IN BRAZIL
Muszbek N*, Munir U*, Vook H*, Schola A*, Valderama A*, Teich V*
1United BioSource Corporation, London, UK, 2Bayer Healthcare, Sao Paulo, Brazil, 3Bayer, Cedra, Rio de Janeiro, RJ, Brazil
OBJECTIVES: Sorafenib is the only agent that has proven to improve survival in AHCC (Llovet, NEJM 2008), and has been considered cost-effective in Canada (Muszbek, Curr Med Res Opin 2008), when compared with BSC. In clinical practice in Brazil, however, patients with AHCC with no access to sorafenib are often treated with other systemic agents, none of which are able to improve the outcome. The objective of this study was to evaluate the cost-effectiveness of sorafenib+BSC vs BSC alone in Brazil, from the perspective of the public health-care system. METHODS: A Markov model was developed to project the lifetime survival and costs for both interventions using data from the TTP and OS Kaplan-Meier curves from SHARP trial using a log-normal distribution and an ad boc panel with Brazilian medical oncologists, hepatologists, and liver surgeons. Treatment effectiveness was measured in life-years gained (LYG), drug, resource utilization included adjuvant prophylaxis, quality of life, and adverse events. Costs (in R$, with R$ 1.00 US$ 0.58) and survival benefits were discounted annually at 5%. Univariate and probabilistic sensitivity analyses were conducted. RESULTS: Lifetime per-patient costs in R$ (US$) were 76,032 (43,447) and 9,776 (5,586) for sorafenib+BSC and BSC alone, respectively, Sorafenib drug cost accounted for nearly 79% of treatment costs. The incremental survival benefit with sorafenib+BSC was 0.49 life-years. The incremental cost-effectiveness ratio of sorafenib+BSC vs BSC alone was R$ 135,262 (US$ 77,293) per LYG. Variations in the lognormal parameters for OS of both alternatives demonstrated to be the most influential variables in the cost-effectiveness result in the deterministic sensitivity analysis. CONCLUSIONS: The addition of sorafenib to BSC is the only intervention that has been found to improve survival in AHCC and the cost-effectiveness results should be interpreted considering the low cost and inefficiency of the comparator.

COST-EFFECTIVENESS ANALYSIS OF THE FIRST-LINE TREATMENT REGIMENS FOR MULTIPLE MYELOMA IN MACAO CHINA
Lee KL, Lee VW1, Kuok KC2
1The Chinese University of Hong Kong, Hong Kong, China, 2Macao Polytechnic, Macao, China
OBJECTIVES: Multiple myeloma (MM) is a hematologic malignancy mainly affecting the elderly population. It is incurable and patients experience a considerable reduction of health-related-quality-of-life (HRQoL). Some newer therapies have shown better clinical effects but are more costly. Pharmacoeconomic studies on MM have been widely conducted overseas but local data was lacking. This study aimed to examine the cost-effectiveness of the treatments for MM in Macao, China. METHODS: A retrospective cost-effectiveness study with HRQoL assessment was conducted. Forty patients from the largest public hospital in Macao from 1997–2001 with confirmed MM were studied. Data for costs and treatment effects were extracted from patients’