Women aged 60–69 (HR 0.87, \( P = 0.019 \)). CONCLUSIONS: There is no significant evidence that treatment with sorafenib has clinical advantages over treatment with sorafenib in patients with metastatic RCC.

**Risk of Breast Cancer Among Users of Postmenopausal Hormone Replacement Therapy in Taiwan**

**OBJECTIVES:** To determine whether the association between the different dosage of hormone replacement therapy (HRT) and the incidence of breast cancer (BC) in postmenopausal women with HRT formulation. METHODS: Patients who had at least one outpatient visit for postmenopausal syndrome (ICD-9-CM code 627) with estrogen and progesterone were identified during the study period. To identify any BC events, each case was tracked from the index date until December 31, 2006 or death, whichever came first. Women without events were censored on December 31, 2006. Survival analysis was performed to assess whether cumulative estrogen dosage and combined progesterone were independent risk factors of BC. RESULTS: A total of 5324 cases of BC were identified during the study period. Women with higher dosage of estrogen had significantly higher risk of BC than women with lower dosage (HR = 2.23, \( P < 0.0001 \)). The risk of BC was even higher when progesterone was combined with estrogen (HR = 1.08, \( P = 0.036 \)). Women aged 60–69 (HR = 0.87, \( P = 0.002 \)) and \( > 70 \) (HR = 0.66, \( P < 0.0001 \)) had lower risk of BC, compared with women aged \( < 60 \). Women living in the northern part of Taiwan and in areas with higher urbanization level had higher risk of BC, compared with their counterparts. CONCLUSIONS: Hormone replacement therapy in postmenopausal women seemed to be associated with an increased risk of BC.

**Estimation on the Incidence of Selected Cancers in China, 2004**

**OBJECTIVES:** To evaluate the clinical effectiveness of sorafenib and sunitinib in metastatic renal cell carcinoma (RCC) by using indirect comparison meta-analysis. METHODS: A systematic literature search of Medline, Embase, Cochrane databases and clinical trials register. All randomized clinical trials of sorafenib or sunitinib versus interferon alpha for treating metastatic renal-cell carcinoma were included. Study selection, data extraction and quality assessment were performed by two reviewers with disagreements being resolved by consensus. The effects of sorafenib and sunitinib on progression-free survival were compared indirectly using indirect treatment comparison method, with interferon alpha (IFN) as a common comparator. RESULTS: Two studies were included. Median progression-free survival was prolonged with the treatment of sunitinib (11 months) compared to interferon alpha (5 months). The comparison of sorafenib and interferon-alpha, the median progression-free survival was similar (median PFS: 5.7 months vs. 5.6 months). Indirect comparison suggests that sunitinib is not superior to sorafenib for prolongation of progression free survival (hazard ratio \( 0.73, P = 0.08 \)) and sunitinib is less toxic, with a median time to discontinuation of 3 months for sunitinib and 1 month for sorafenib.

**Conclusions:** The difference in the effects of sorafenib and sunitinib on progression-free survival were not statistically significant. However, sunitinib showed similar median progression-free survival compared to sorafenib.

**Identifying Key Procedures in Hepatocellular Carcinoma Patients with Highest Payer Budget Impact in a Commercially Insured Population in the United States**

**OBJECTIVES:** The incidence of hepatocellular carcinoma (HCC) is highly prevalent in East Asia with a growing incidence in the United States, the economic impact of the disease has not been extensively studied. This study compares medical costs of HCC patients in the first year after diagnosis with those of non-cancer controls. METHODS: A Medicaid database (July 1, 2001–June 30, 2007) was used to identify cases with \( > 1 \) HCC claim, \( > 1 \) HCC post-diagnosis claim, and other cancers. Controls were matched on age, sex, and race. Costs (2008 USD) for medical care services (inpatient, outpatient, emergency room [ER], long-term care [home health, nursing home, hospice]) were analyzed as first-year costs and follow-up adjusted costs (per-patient-per-month [PPPM]). All costs were compared using rank sum tests. RESULTS: The study identified 126 HCC cases and 126 controls: mean age 49 years, 51% male, mean follow-up months: 9.2 cases/11.9 controls, and deaths: 29.4% cases/1.6% controls. First-year costs were 1.5 to 8 times higher in cases versus controls (long-term care: \$375 vs. \$255, ER: \$126 vs. \$51, outpatient: \$413 vs. \$142, inpatient: \$12,425 vs. \$1595, with \( P < 0.012 \)). PPPM costs were 3 to 27 times higher in cases versus controls (long-term care: \$626 vs. \$233, outpatient: \$884 vs. \$119, ER: \$34 vs. \$4, inpatient: \$3738 vs. \$139, all with \( P < 0.001 \)). Total costs were two times higher in HCC cases in the first year (\$29,795 vs. \$13,151, \( P < 0.001 \)) and six times higher in the follow-up year compared to non-cancer controls. CONCLUSIONS: First-year medical care costs were substantially higher for the HCC patients, and even higher when adjusted for follow-up on a PPPM basis. Future therapies that improve survival and disease control may enable payers to reduce monthly costs, and use the savings to treat other patients.