THE ASSOCIATION OF TUMOR HISTOLOGY WITH FIRSTLINE TREATMENT AND LIFETIME MEDICAL-CARE COSTS AMONG ELDERLY STAGE IIIIB/IV NON-_SMALL CELL LUNG CANCER (NSCLC) PATIENTS TREATED WITH COMMONLY USED DOUBLETHERAPIES AMONG

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OBJECTIVE: Evidence concerning the relationship between medical-care costs and tumor histology among advanced-staged NSCLC patients is lacking. The purpose of this analysis was to identify costs associated with first-line chemotherapy treatment and total lifetime medical-care costs by tumor histology among elderly Stage IIIIB/IV NSCLC patients treated with commonly used doublet chemotherapy regimens. METHODS: Study patients included those aged 65 years and older who were diagnosed with Stage IIIIB/IV NSCLC in a SEER cancer registry between 1997 and 2002 and who received first-line treatment with a commonly used doublet regimen. Study patients were followed in the SEER-Medicare database to evaluate costs while on first-line chemotherapy treatment as well as lifetime medical-care costs by histology for commonly used doublets. Pairwise comparisons of costs estimated using non-parametric bootstrap methodology were generated for treatment comparisons. Estimated differences in mean costs, adjusted for sex, race age, urban/rural, geographic region, stage, Charlson comorbidity index and tumor histology are presented. RESULTS: Total lifetime medical-care costs for elderly IIIIB/IV patients with squamous cell carcinoma were $51,360, while costs for those with non-squamous cell carcinoma were $50,905. Costs per month were $6364 and $6870 respectively, and were dominated by hospital and physician utilization. Among commonly used doublets, the estimated difference in adjusted mean total costs for Cisplatin/Carboplatin (P) and a Taxane (T) were significantly higher when compared to P and Gemcitabine (G) (difference $4816 [$1554–$8101]). Similar findings were observed for costs while on first-line therapy, (difference $5686 [3738–5760] respectively). CONCLUSION: While lifetime medical-care costs and costs while on first-line chemotherapy among treated Stage IIIIB/IV NSCLC patients are substantial, the cost differential between squamous cell and non-squamous cell carcinoma is small. Controlling for tumor histology and other factors, patients treated with a combined platinum and taxane regimen experienced the highest costs.
OBJECTIVE: Non-melanoma skin cancer incidence is increasing yet no specific guidelines for treatment selection exist. Reports vary on surgical treatment efficacy, and treatment choice may be based in-part on costs, despite little comparative cost information. We compared 2007 treatment costs of the three most common nonmelanoma skin cancer treatments: tumor destruction by E&D&C, excision, and histologically-guided serial excision (Mohs surgery). METHODS: We studied 936 consecutive non-melanoma skin cancers diagnosed in 1999–2000 in a university-affiliated dermatology practice. Clinical and utilization data were obtained from patient surveys and medical records. We determined costs of treatments, repairs, pathology, and biopsies based on size, lesion location, number of Mohs stages, medications, and physician visits, using CPT codes and Medicare fees. We controlled for procedure risk-selection factors in our sample.

RESULTS: A total of 27.2% of lesions were treated with E&D&C, 29.2% with excision, and 43.6% with Mohs surgery. The weighted average costs per lesion for initial treatment for E&D&C, excision, and Mohs were $221, $529, and $1287, respectively. When wound repairs, pathology, drug costs and follow-up physician visits were included, costs rose to $646, $1531, and $2805. When controlling for risk selection using Mohs sample for baseline risk, initial costs changed little ($232, $578, $1287). However, when adding all costs to the controlled sample, the totals rose to $1750, $2096, and $2805, and differences across treatments diminished. The uncontrolled costs of Mohs procedures itself (46%) accounts for a greater percentage of total costs compared with the other two procedures (35%, 34%), and more than subsequent repair costs (31%, 20% 2%). CONCLUSION: Mohs surgery was the most costly procedure, however cost differences across treatments diminished when controlling for treatment selection factors. This is the first cost study which compares surgical treatment costs using the new (2007) Medicare/CPT costing rules allowing higher payments for increased complexity of lesion location.