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crease the dose/frequency of octreotide-LAR as 2nd-line therapy in patients with uncontrolled symptoms up to 60 mg every 4 weeks or up to 40 mg every 3 or 4 weeks for refractory carcinoid syndrome; and 3) as 3rd-line therapy, antiangiogenic therapy may be active in patients with carcinoid tumors. **CONCLUSIONS:** Treatment consensus obtained in this study is concordant with NCCN recommendations. The Delphi process, however, permitted more detailed medical treatment guidelines in a range of key areas in midgut NETs.

PCN117

AN EXPERT PANEL CONSENSUS ON MEDICAL TREATMENT OF NON-MIDGUT UNRESECTABLE NEUROENDOCRINE TUMORS

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OBJECTIVES: Gastrointestinal neuroendocrine tumors (NETs) are rare and current treatment guidelines lack specificity in some clinical areas. We present a panel consensus on medical treatment of well-differentiated (grade 1-2 tumors) unresectable non-pancreatic non-midgut NETs. **METHODS:** NET treatment appropriateness ratings were collected using the RAND/UCLA Delphi process. We recruited physician experts (criteria: specialty, geography, practice), reviewed NET treatment literature, and collected 2 rounds of ratings (before and after a face-to-face meeting) from the experts. Experts and the moderator were blinded to the funding source. Patient scenarios (rated on a 1-9 scale indicating appropriateness of various interventions for a given scenario) were labeled as appropriate, inappropriate, or uncertain. Scenarios with >2 ratings from 1-3 and >2 from 7-9 range were considered to have disagreement and were not assigned an appropriateness rating. **RESULTS:** Ten panelists had a mean age of 50.4 years. Specialties represented were medical and surgical oncology, interventional radiology, and gastroenterology, and all practices were affiliated with academic institutions. Panelists had practiced between 6-33 years. Among 202 non-midgut rated scenarios, disagreement decreased from 16.2% (32 scenarios) before the meeting to 3% (6) after. In the 2nd round, 42.1% (85 scenarios) were rated inappropriate, 34.2% (69) were uncertain, and 20.8% (42) were appropriate. Consensus statements from the scenarios include: 1) observation is appropriate in patients with no symptoms and low-volume radiographically-stable disease; 2) somatostatin analogs may be appropriate in patients with secretory symptoms; and 3) everolimus or interferon-α can be considered in patients who progressed radiographically or symptomatically on somatostatin analogs. **CONCLUSIONS:** We obtained appropriateness ratings of variety medical therapies in NETs from expert physicians. The Delphi process enabled participants to systematically quantify their assessment of the literature in a valid and reliable way while improving overall panel consensus on the appropriateness of medical therapies in non-midgut NETs.

PCN118

PROMOTING TOBACCO CESSATION AMONG CANCER PATIENTS: A NATIONAL SURVEY AMONG ONCOLOGY PROVIDERS IN THE UNTIED STATES

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OBJECTIVES: Tobacco use following cancer diagnosis is a serious concern for negative health outcomes. Despite ill-effects of tobacco among cancer patients and negative implications for treatment, many patients continue to use tobacco. Oncologists have a pivotal role in promoting tobacco cessation throughout treatment. This study assessed knowledge, readiness, and willingness to conduct and promote tobacco cessation counseling among a national sample of currently licensed practicing US Oncology providers. **METHODS:** A brief survey was administered in July 2011 via e-mail (N=3006) and US postal mail (N=1000). Samples were obtained from SK&A Information Services, Inc., which used verified addresses and broadcast e-mail surveys with one follow-up. Response rates were 0.6% for e-mail (N=19) and 9.6% for postal mail (N=96), with a 2.9% overall response rate (N=115). **RESULTS:** Results showed a majority of oncologists do the following often/almost always with patients: ask about tobacco use (96.6%); document tobacco use (93.1%); discuss tobacco use as a cancer risk factor (87.9%); counsel patients on quitting (72.8%); and assess readiness to quit (68.7%). Findings, however, also reported a majority of oncologists do the following never/rarely with patients: provide information about secondhand tobacco smoke (53.5%); provide information on quitlines (59.7%); provide brochures and self-help guides (64.3%); and follow the 5A's model for tobacco treatment (68.6%). On a scale of 0-10, providers indicated they were generally comfortable providing cessation counseling [mean=7.0; SD=2.4]; however, providers were less willing to participate in a tobacco cessation training program for assisting patients with quitting [mean=5.2; SD=3.4]. **CONCLUSIONS:** Findings suggest oncology providers are asking, documenting use, and counseling patients who continue to use tobacco during treatment. Education targeting providers can increase knowledge and practices related to the 5A's treatment model, promoting quitline and self-help information for patients. Effective strategies increasing provider willingness to attend tobacco treatment training sessions should also be encouraged.

PCN119

CHEMOTHERAPY TREATMENT AND SURVIVAL OUTCOME

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OBJECTIVES: The main objective was to determine the chemotherapy treatment and outcome. **METHODS:** Data was collected from 1 June 2008 till 31 December 2008 in Hospital Kuala Lumpur (HKL) using web-based application. Survival data would be obtained via linkage with Registration Department after four years. Data analysis was with STATA statistical software. **RESULTS:** The total number of patients was 1192.There were 56% females and the most common age group was 50-59 years. The major ethnic groups were Malay (46.5%), Chinese (37.3%) and Indians (13.8%). Most patients at the oncology clinic at HKL have good performance status with ECOG 0-1 (61.5%). The most prevalent cancers were breast cancer (24.5%), colorectal cancer(17.4%), bronchus and lung cancer 8.6%, cervical cancer 6.5% and nasopharyngeal cancer (NPC) 6.2%. Most solid tumours were treated by multimodality. 48.8% received 2 or more modalities . There were 547 patients (45.9%) that received radiotherapy and 32.2% that received chemotherapy. 384 patients were given cytotoxic chemotherapy . Most patients (84,1%) received just one regime. The most common regime was a combination of Fluorouracil, Epirubicin and Cyclophosphamide ie FEC (16.4%.) The most often used cytotoxic drugs used were Fluorouracil (26.3%), Cisplatin (15%) followed by Cyclophosphamide (9.9%), Epirubcin (7.3%), Capecitabine (6.4%), Docetaxel (4.2%), Gemcitabine (3.7%). The most often used route of administration was intravenous (92.6%) mostly infusion as opposed to bolus. Capecitabine was the cytotoxic dug that was the most widely used in the oral form. **CONCLUSIONS:** This is only sub-study of a long term research that began in 2008 in HKL.. Patterns in chemotherapy usage would change as new drugs emerged in the Formulary. The database would be sustained as a platform for future researches and for survival analysis. (283 words).

PCN120

THE IMPACT OF UNIVERSAL HEALTH INSURANCE COVERAGE ON USE OF MEDICINES FOR NON-COMMUNICABLE DISEASES IN THAILAND

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OBJECTIVES: In 2001, Thailand implemented the 30 Baht Scheme, a public insurance scheme that covers the poor and uninsured and pays providers through a capitated payment scheme. Our objective is to evaluate the impact of the 30 Baht Scheme on use of medicines in Thailand for three non-communicable diseases: cancer, cardiovascular disease, and diabetes. **METHODS:** We used an interrupted time series design to measure the impact of the 30 Baht Scheme on total pharmaceutical market volume and market share. We used IMS Health data on quarterly purchases of medicines from hospital and retail pharmacies from 1998 to 2006. **RESULTS:** The 30 Baht Scheme was associated with long-term increases in hospital sector sales of medicines for conditions that can be adequately treated in outpatient and primary care settings (e.g., diabetes, high cholesterol and high blood pressure). The policy was associated with no change in sales of medicines for more life-threatening diseases, which are more appropriately treated in secondary or tertiary settings (e.g., myocardial infarction, stroke and cancer). The majority of sales were for essential medicines, yet there were also post-policy increases for non-essential medicines. Immediately following the reform, there was a significant shift in hospital sector market share by licensing status for most classes of medicines. We observed large increases in government-produced products, primarily at the expense of branded generics. **CONCLUSIONS:** Our results suggest that expanding health insurance coverage with a medicines benefit to the entire Thai population increased the volume of medicine sales in primary care hospitals. Our study, however, also suggests that implementation of the 30 Baht Scheme may have been associated with possibly undesirable effects: increased use of non-essential medicines and decreased use of less expensive generics and medicines in secondary and tertiary settings. Thorough evaluation of desired and undesired effects of universal health insurance programs are urgently needed.

PCN121

EVALUATION OF AROMATASE INHIBITOR UTILIZATION AND FAILURE IN POST-MENOPAUSAL WOMEN WITH ADVANCED ER+/HER2- BREAST CANCER

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OBJECTIVES: To compare the demographic, clinical and treatment characteristics of post-menopausal women with advanced ER+/HER2- breast cancer (BC) treated with aromatase inhibitors (AI) who experienced 0 or ≥ 1 AI failure (AIF). **METHODS:** Women ≥ 55 years old, newly diagnosed with metastatic ER+/HER2- BC (index) were identified from the 2006-2010 *Thomson Reuters MarketScan* databases. Patients in the 6-month pre- or variable post-index periods treated with endocrine (ET: tamoxifen, fulvestrant) or AI (anastrozole, letrozole, or exemestane) therapy (ER+) and not with trastuzumab or lapatinib (HER2-), with no pre-index diagnosis of primary cancer other than BC, and post-index treatment with ≥ 1 AI were retained. AIF was defined post-index as a switch to an alternative AI, ET, or chemotherapy, or AI discontinuation with no further BC treatment. **RESULTS:** Among 4274 ER+/HER2- BC patients studied, 61% had ≥ 1 AIF (80% had 1 and 20% had 2+ AIFs). There was no difference in pre-index AI use (54.4% no AIF, 51.8% AIF; p=0.093). At index, AIF patients were more likely to be Medicare-eligible (57% vs. 51%) with liver (7% vs. 4%), lung (10% vs. 8%), bone (56% vs. 48%), and brain (7% vs. 5%) metastases, all p<0.03. Mean follow-up days was shorter for AIF patients (486 vs. 522, p=0.006). First line AI and ET treatments were respectively 95% and 5% for AIF and 97% and 3% for no AIF patients. The most common first line therapy was anastrazole (49%

no AIF 42% AIF). Overall, with each subsequent line of therapy the proportion of AIF patients taking fulvestrant increased. In addition, of those with AIF, 35% (n=905) switched to chemotherapy prior to study end. **CONCLUSIONS:** The majority of ER+/HER2- metastatic breast cancer patients treated with AIs will fail at least 1 line of therapy. Prior AI treatment did not appear associated with future AI failure.

PCN122

DTIC AND GM-CSF IN THE TREATMENT OF PATIENTS WITH METASTATIC MELANOMA

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OBJECTIVES: To describe patients with metastatic melanoma being treated with mono-therapy, dacarbazine (DTIC) or granulocyte-macrophage colony-stimulating factor (GM-CSF). **METHODS:** Using a large US medical claims database, patients were identified between 2005 and 2010 using ≥2 melanoma diagnoses (ICD-9-CM: 172.xx, V10.82) and ≥2 diagnoses for metastasis (ICD-9-CM: 197.xx, 198.xx). Patients who received mono-therapy with DTIC or GM-CSF as the first documented drug therapy after metastatic diagnosis were identified. Patient demographic and clinical characteristics and treatment duration were compared between patients treated with DTIC and those who received GM-CSF. Furthermore, comparisons were also made between the two treatment groups after 1-to-1 matching on age, gender, and baseline comorbidities. **RESULTS:** A total of 81 patients with metastatic melanoma receiving first-line DTIC and 24 patients with metastatic melanoma receiving first-line GM-CSF were included in this analysis. On average, DTIC patients were 8.5 years older ($p = 0.009$) and had higher baseline Charlson Comorbidity Index scores (D0.43, $p = 0.005$) than GM-CSF patients. The mean duration of first line treatment was 94 days on DTIC and 135 days on GM-CSF. The mean length of follow-up from the start of first line was 257 days on DTIC and 451 days on GM-CSF. After each GM-CSF patient was matched with a DTIC patient on age, gender, and baseline Charlson Comorbidity Index score, the mean duration of first line treatment was 79 days on matched DTIC and 135 days on GM-CSF, and the mean length of follow-up from the start of first line was 317 days on matched DTIC and 451 days on GM-CSF. **CONCLUSIONS:** Patients with metastatic melanoma who received DTIC treatment were older and had higher comorbidity index scores but shorter treatment duration than those who received GM-CSF; the difference in treatment duration remained after DTIC patients were matched with GM-CSF patients on age, gender and comorbidity index scores.

PCN123

RETROSPECTIVE STUDY OF HEALTH CARE UTILIZATION AND COSTS IN WOMEN WITH METASTATIC BREAST CANCER (MBC) RECEIVING LAPATINIB AFTER TREAMENT WITH TRASTUZUMAB

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OBJECTIVES: Lapatinib is an oral dual tyrosine kinase inhibitor that has been shown to improve time to progression when combined with capecitabine versus capecitabine monotherapy in women with HER2+ MBC previously treated with trastuzumab. Data on health care utilization and costs among women receiving lapatinib in typical clinical practice are scarce. **METHODS:** This was retrospective observational descriptive study of health care utilization and costs among women receiving lapatinib after treatment with trastuzumab for MBC in the Thomson MedStat MarketScan Commercial and Medicare health insurance claims databases (1/2000-3/2010). Monthly utilization and costs were calculated for the 12 months prior to initiation of lapatinib (pre-treatment period), the lapatinib treatment period, and the post-treatment period (end of lapatinib treatment to end of study/disenrollment). **RESULTS:** Mean (SD) age was 52(8) and 72(6) years in Commercial (n=572) and Medicare (n=94) patients respectively. Lapatinib was initiated in combination w/capecitabine in 63% and w/trastuzumab in 22% of patients. Median time to lapatinib discontinuation was 7.4 months. The mean(SD) number of visits/month declined from 6.1(3.0) during pre-treatment to 5.5(3.5) during treatment, and to 4.6(3.9) during post-treatment. The mean(SD) number of inpatient days/month increased progressively from 0.24(0.52) during pre-treatment, to 0.53(1.39) during treatment and 0.96(2.52) post-treatment. Mean(SD) lapatinib costs/month during treatment were $2,097($877). Mean(SD) trastuzumab costs/month were $2,762($2,020), $722($1,731), and $1,166($2,134) during pre-treatment, treatment, and post-treatment, respectively. Corresponding mean(SD) chemotherapy costs/month were $1,355($1,898), $1,496($1,698), and $1,437($2,729), respectively, while corresponding mean(SD) chemotherapy administration costs/month were $508($477), $189($289), and $326($516) respectively. Mean(SD) other (including inpatient) costs/month were $5,446($4,680), $5,564($7,198), and $6,880($9,726), respectively. Mean(SD) total costs/month were $10,071($6,056), $10,067($7,695), and $9,809($10,853), respectively. **CONCLUSIONS:** In this sample of women receiving lapatinib after treatment with trastuzumab for MBC, monthly health care costs were similar during lapatinib treatment versus prior to treatment, despite progressively increasing inpatient utilization and costs, potentially reflecting disease progression over time.

PCN124

FERPAC: A PRACTICE SURVEY ON THE ADMINISTRATION OF IV IRON COMPLEXES ON A CENTRAL VENOUS ACCESS PORT IN CANCER PATIENTS IN FRANCE

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OBJECTIVES: Iron deficiency anemia is commonly treated with intravenous (IV) iron in oncology, especially in combination with erythropoiesis-stimulating agents. Central venous access port – PortaCath (PAC) – is used to provide long-term venous access and to deliver chemotherapy in this setting. There is a lack of data, however, on the use of PAC for the administration of IV iron in cancer patients. The aim of this survey was to assess the frequency of this practice, and the reasons supporting it. **METHODS:** FERPAC was a declarative survey conducted in France. A total of 497 oncologists/hematologists were interviewed on their practices regarding their use of IV iron. Answers were collected and registered into a central-based server. **RESULTS:** A total of 141 questionnaires were collected. Most used IV irons were iron sucrose and ferric carboxymaltose, for which respectively 77.4% and 77.6% of physicians reported to use the PAC for the administration. The main reasons for using the PAC were the easy way of administration (28.2%) and the preservation of patient venous capital (26.1%), given that efficacy and safety were expected to be at least acceptable or even as good as peripheral administration. IV iron administration was planned strictly after chemotherapy (45.7%), strictly before (37.2%), or without any preference (17.0%). Reasons for not using the PAC were either a history of thrombosis (45.1%) or potential drug-drug interactions (17.7%). **CONCLUSIONS:** IV irons are currently commonly administered through the PAC in cancer patients in France. Further studies are needed to confirm the efficacy and safety of the administration of IV iron through PAC.

PCN125

PREDICTORS OF METHOTREXATE CONTAINING CHEMOTHERAPY IN WOMEN DIAGNOSED WITH EARLY STAGE BREAST CANCER

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OBJECTIVES: To determine the utilization and predictors of Cyclophosphamide-Methotrexate-Fluorouracil (CMF) chemotherapy in women with early stage breast cancer. **METHODS:** A longitudinal study was conducted including patients 66 years and above, diagnosed with stage I-III breast cancer using SEER cancer registry data linked with Medicare claims. Patients were divided into two groups as those receiving CMF chemotherapy and those receiving other chemotherapy. A patient was considered as receiving CMF chemotherapy if she started chemotherapy within six months and had a claim of Cyclophosphamide, Methotrexate and 5-Fluorouracil within one year of diagnosis. Multiple logistic regression was conducted to assess the predictors of CMF chemotherapy use. **RESULTS:** A total of 11,322 women received chemotherapy within the first six months and 24.4% of these (n = 2758) received CMF chemotherapy. A patient had 2.3 times greater odds of receiving CMF chemotherapy with each year increase in age. Patients who received a lymph node dissection had 1.4 times greater odds of receiving CMF chemotherapy than patients who did not receive it. Patients with stage II tumor had 1.5 times greater odds of receiving CMF chemotherapy than stage I patients. CMF use decreased by 23% with estrogen receptor positivity and 18% when radiation was administered to the patient. Patients with Charlson's comorbidity index ≥ 1 were 16% more likely to receive CMF chemotherapy than patients who had a Charlson's comorbidity score of 0. CMF use decreased overall with time. **CONCLUSIONS:** This study found that age, comorbidity index, estrogen receptor status, radiation and lymph node dissection were significant predictors of CMF chemotherapy. The use of CMF chemotherapy increased with age, comorbidity index and lymph node dissection and decreased with estrogen receptor positivity and irradiation. The declining time trend in the use of CMF chemotherapy probably indicates the increased use of newer chemotherapy regimens like the Anthracycline and Taxane based regimens.

PCN126

RADIATION AFTER BREAST-CONSERVING SURGERY: COMPLIANCE OF CLINICAL GUIDELINE AMONG YOUNG WOMEN WITH EMPLOYMENT-BASED INSURANCE IN THE UNITED STATES

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OBJECTIVES: Evidences-based literature has confirmed the effectiveness of radiation therapy (RT) following breast conserving surgery (BCS); thus several practice guidelines recommend RT after BCS. This study explored factors associated guideline compliance among young women with insurance because compliance in this population is not well-understood. **METHODS:** Using the 2004-2009 MarketScan® Research Database, we identified our study cohort as women who had a BCS between July 1, 2004 and December 31, 2008, and had continuous enrollment from 6 months before to 12 months after the date of BCS. We excluded patients who had mastectomy within 3 months of BCS. We used Pearson Chi-Squared test and multivariate logistic regression to ascertain factors associated the receipt of RT within one year of BCS. We performed Hosmer-Lemeshow goodness-of-fit and other model diagnostic tests to determine the final model specification and conducted all analyses using SAS® 9.2 and Stata® 11.0 software. **RESULTS:** A total of 20,756 of the 24,011 (86.44%) BCS patients received RT within a year of their surgery. Results from the logistic regression showed that the odds of RT increased with age, compared with patients under 40, the odds ratio was 1.63 (95% confidence interval: 1.40-1.90), 1.86 (1.61-2.16), and 2.04 (1.73-2.39) for those in 40-49, 50-59, and ≥ 60 age group, respectively. Patients who did not enroll in HMOs (1.27; 1.17-1.37) and was primary insurance policy holder (1.31; 1.21-1.41) were significantly more likely to receive RT. Compare with patients resided in the Northeast region, those in the West were less likely to receive RT (0.71; 0.62-0.82). Positive association with hospital density was also observed (1.17; 1.04-1.31). **CONCLUSIONS:** Although the compliance rate among young women with employment-based insurance was higher than that