

right breast (53%) while about 43% had of left breast. Patients with breast cancer were mostly married (99%) & patients were belonging to poor socioeconomic status. Diagnostic tests performed for most of the cancer patients were mammography, biopsy, USG, X-ray & MUGA & bone scan and about 60% of the population had undergone mastectomy. **CONCLUSIONS:** Infiltrating ductal carcinoma (96%) was found the most common type of breast cancer in southern Punjab. The socioeconomic status of the patients might affect the prevalence of breast cancer in patients

PCN123

THE USE OF COMPLEMENTARY AND ALTERNATIVE MEDICINES (CAM) AMONG PATIENTS WITH CANCER: A DESCRIPTIVE STUDY

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OBJECTIVES: To evaluate the prevalence and patterns of CAM use among cancer patients in Malaysia. In addition, the study focuses on the perceived effectiveness of CAM over conventional therapies, information seeking behaviour and CAM disclosure to health care providers. **METHODS:** The study was designed as a questionnaire based, cross sectional analysis. A prevalence based sample of 393 cancer patients attending the oncology clinics at Penang General Hospital was hereby selected for the study. Adult patients (18 years old), having diagnosed with cancer (any type), able to read or understand Malay (national language of Malaysia) or English language were recruited between August to November 2011. **RESULTS:** Overall, 393 questionnaires were completed and included in the analysis, showing that 46.1% of cancer patients had used CAM, with most (57.6%) believing that CAM therapies assisted the body's natural forces to heal. CAM usage was significantly associated with gender ($P=0.021$), level of education ($P=0.001$), employment status ($P=0.02$) and monthly income ($P<0.001$). Among the frequently used CAM were biologically-based therapies including nutritional supplements (used by 75.5% of the participants). Friends and family members were the most common source of CAM information (for 75.5% of the participants). Only 13% reported side effects from using CAM. CAM use disclosure to the doctors was 43%; however, doctors had specifically asked about CAM use in 33.4% of the cases. The most common reason given for non-disclosure was 'it is not important for the doctors to know about CAM use (34.2%)'. **CONCLUSIONS:** Cancer management and treatment requires compliance to effective therapies at early stages. Health care providers should engage cancer patients in an open non-judgmental dialogue to ascertain better understanding of cancer and its treatment options.

PCN124

INDIVIDUAL RISK PROFILING FOR BREAST CANCER RECURRENCE: TOWARDS TAILORED FOLLOW-UP SCHEMES

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OBJECTIVES: Current international guidelines for breast cancer follow-up are not specific to individual risk of local regional recurrences. Instead, for personalised follow-up it is required to have more precise estimates of local regional recurrence probability as a function of time. The objective of this study is to identify prognostic factors, and to quantify individualized and time dependent local regional recurrence risk rates. **METHODS:** Prognostic factors for local regional recurrence of breast cancer were identified due to a three-step funnel approach, including: scoping literature review, expert consultation and stepwise multivariate regression analysis. Quantification of the prognostic value of each risk factor was performed with a regression model based on a five-year dataset of women diagnosed with breast cancer in the Netherlands in 2005 or 2006 ($n=17762$). Six-month interval risk probabilities were derived from regression estimates by calculating coefficients of the prognostic factors. **RESULTS:** Eight prognostic factors were identified, including: age, tumour size, multifocality, gradation, adjuvant chemo-, adjuvant radiation-, hormonal therapy and triple negative status. Expected inter-patient variability was elucidated by average, and high risk example patient types with local regional, non-uniform distributed, recurrence risks of 5.2% and 12% over a five-year period. **CONCLUSIONS:** It is concluded that local regional recurrence risks are not distributed uniformly, and time depended, over the five-year follow-up period. The calculated prognostic value of the factors enables quantification of risks for local regional recurrences on six-month time intervals for the individual patient. Implicating improved allocation of hospital capacities and resources, local regional recurrence risk profiling is a first step towards tailored follow-up in breast cancer care.

PCN125

QUANTIFICATION OF BENEFITS AND RISKS IN MEDICAL IMAGING TESTING: A LITERATURE REVIEW

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OBJECTIVES: Appropriate use of medical imaging tests is a growing area of policy discussion. Quantitative methods can characterize benefits and risks of medical imaging tests and distinguish necessary from unnecessary utilization. Our objective was to assess the extent of quantitative benefit-risk analyses (BRA) published in medical imaging testing. **METHODS:** Using PubMed and the Cochrane Library, a computerized search was performed to identify studies published between January, 1979 and January, 2013. The search was limited to include only studies that quantified benefits and risks/harms of ionizing

radiation imaging in screening or diagnostics. **RESULTS:** Seventy-eight studies called for the need to weigh benefits and risks associated with medical imaging tests but only seven studies quantified at least one benefit and one risk/harm. Of these, two studies reported BRA of mammography. Three studies addressed positron emission tomography (PET): two studies assessed BRA of full body PET in cancer screening and one study assessed BRA of PET in lung cancer diagnosis. The remaining two studies reported BRA of computed tomography colonography. Of the four studies published in English, benefits were reported in terms of life extension, and harms were reported as radiation-related cancer risk or loss of life-years. Studies used micro-simulation modeling, epidemiological or survey methods. **CONCLUSIONS:** This review illustrates that a gap exists between the number of studies referring to the need for assessing the benefit-risk balance in medical imaging and the number of studies measuring that balance. Challenges such as translating imaging information into impacts on patient outcomes, multiple applications of imaging tests, difficulty in measuring harms from ionizing radiation and additional procedures spurred from false positive results hinder the necessary movement toward using quantitative methods. Meeting the goals of patient-centered outcomes and understanding areas of appropriate use, overutilization and underutilization requires further development of a framework for quantitative BRA of medical imaging tests.

PCN126

WHICH IS MORE VALUABLE, LONGER SURVIVAL OR BETTER QUALITY OF LIFE? ISRAELI ONCOLOGISTS' AND FAMILY PHYSICIANS' ATTITUDES TOWARD THE RELATIVE VALUE OF NEW CANCER AND CONGESTIVE HEART FAILURE INTERVENTIONS

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OBJECTIVES: Willingness to pay (WTP) for new health technologies may vary between interventions that prolong patients' life-expectancy and interventions that only improve patients' quality of life (QoL), and among different types of disease. We determined how Israeli oncologists and family physicians value life-prolongation vs. QoL-enhancing outcomes attributable to cancer and congestive heart failure (CHF) interventions. **METHODS:** We presented physicians with two scenarios involving a hypothetical patient with metastatic cancer expected to survive 12-months with current treatment. In a life-prolongation scenario, we suggested that a new treatment increases survival at an incremental cost of \$50,000 over the standard of care. Participants were asked what minimum improvement in median months of survival the new therapy would need to provide for them to recommend it over standard of care. In the QoL-enhancing scenario, we asked the maximum WTP for an intervention that leads to the same survival as the standard treatment, but increases patient's QoL from 50 to 75 (on a 0-100 scale). We replicated these scenarios substituting a patient with CHF NYHA Class IV instead of metastatic cancer. We derived the incremental cost-effectiveness ratio (ICER) per QALY gained threshold implied by each response. **RESULTS:** In the life-prolongation scenario the median cost-effectiveness thresholds implied by oncologists were \$150,000/QALY and \$100,000/QALY for cancer and CHF respectively. Median cost-effectiveness thresholds implied by family physicians were \$50,000/QALY regardless the disease type. WTP for the QoL-enhancing scenarios was \$60,000/QALY and did not differ by physicians' specialty or disease type. **CONCLUSIONS:** Our findings suggest that family physicians value life-prolonging and QoL-enhancing interventions roughly equally, while oncologists value interventions that extend survival more highly than those that only improve QoL. These findings may have important implications for coverage and reimbursement decisions of new technologies.

PCN127

CANCER DRUG PRICING TRENDS IN THE UNITED STATES AND THE UNITED KINGDOM (2011-2013)

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OBJECTIVES: To understand relative price differential for cancer drugs in the U.S. and the U.K.. Develop implications for pricing strategy and patient access for cancer drugs. **METHODS:** Ten branded cancer drugs were selected and their prices for similar dose and packaging were compared in the U.S. and the U.K. Prices were analyzed for the end of 2011 and 2012. Historical exchange rates were used to convert British pounds to US dollars. Relative price discount was calculated for all selected cancer drugs. KOLs and payers were interviewed to understand current and future implications of this price differential. **RESULTS:** The median price discount for selected ten branded cancer drugs in the UK versus the United States was ~50%. The range of discount for 10 branded cancer drugs was 27%-61%. The price discount for oral small molecule drugs was higher than for biologics (55% vs. 45%). Since the U.K. is one of the few remaining free pricing markets in Europe, other European markets are likely to have even higher discounts relative to the prices in the U.S.. Due to rising coinsurance of specialty products, U.S. cancer patients bear significantly higher costs than patients in the UK. KOL and payer interviews suggest U.S. pricing trends for cancer drugs are unlikely to be sustained at this level in the future. **CONCLUSIONS:** U.S. cancer drug prices are significantly higher than the prices in the U.K. This price differential is unlikely to be sustained in the future.

PCN128

A COMPARISON OF MEDICAL COMPUTED TOMOGRAPHIC UTILIZATION AND POTENTIAL RELATED CANCER RISKS IN THE UNITED STATES AND IN CANADA

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