

respective study was based on the National Health Insurance Fund Administration financing database. The study period spanned between 01.01.2005 and 12.31.2014. Several oncological fields were investigated: lung cancer (ICD C34), prostate cancer (ICD C61), kidney cancer (BNO C64-C65), breast cancer (ICD C50), haematopoietic and lymphatic system cancer (ICD C81-85, C88, C90-96) and colorectal cancer (ICD C18-C20). The trends in overall survival (OS) have been computed and compared for each subgroups using Cox proportional hazard models. **RESULTS:** In general there was found that age, metastatic stage and comorbidities were the most relevant covariates in all groups. Analysing trends of mortality there is a difference between patients who were diagnosed in 2007 comparing to those who were diagnosed in 2011. **CONCLUSIONS:** The magnitude of the fitted trends could be very different, the precise reasons of the differences and the difference of cost, the relative risk of the mortality, and the comorbidity effects within the variant disease groups should be further investigated. The applied framework methods can serve both direct comparison and forecasting models in care management, e.g. Disability-Adjusted Life Year, Quality-Adjusted Life Years, Years of Potential Life Lost.

PCN10

PREVALENCE OF DEPRESSION AND ANXIETY AND THEIR RISK FACTORS IN WOMEN WITH BREAST CANCER IN GERMAN PRIMARY CARE

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OBJECTIVES: Although the psychological effect of breast cancer (BC) diagnosis is well documented, less is known about the prevalence of, and risk factors for depression and anxiety in the BC patients. **METHODS:** Women initially diagnosed with breast cancer (ICD 10: C50) between January 2009 and December 2013 (indexdate) were identified from 1,202 general practitioner's (GP) and 244 gynecologist's (GYN) practices in the IMS Disease Analyzer database. Patients were included only if they did not have any diagnosis of depression or anxiety within 12 months before index date. The main outcome measure was the first diagnosis of either depression or anxiety disease within one year after indexdate. A total of 23,709 patients at GPs and 19,977 at GYN were available for the analysis. **RESULTS:** Baseline characteristics of study patients were as follows: mean age was 64.3 years, 9% had a private health insurance, 9.4% of patients had a metastatic BC. After 1 year of follow-up, 17.4% of patients at GPs and 19.2% at gynecologists were diagnosed with depression or anxiety. There was a significantly higher risk of depression/anxiety in the age groups 41-50 (HR: 1.27, p<0.001) and 51-60 (HR: 1.30, p<0.001) compared to <40 years. There was a much higher risk of depression/anxiety in patients with metastatic breast cancer (HR: 1.20, p<0.001) and patients with depression/anxiety episodes in the past (>1 year prior to indexdate (HR: 1.91, p<0.001). Private health insurance was associated with a significantly lower depression/anxiety risk (HR: 0.43, p<0.001). **CONCLUSIONS:** Analysis of real-world data from German primary care practices identified potential risk factors for the development of depression/anxiety disorder among BC patients. Being aware of these risk factors could facilitate early prevention and support for affected patients with potentially beneficial implications for their overall therapy. Further research has to be done to investigate these risk factors in more detail.

PCN11

THE EFFECT OF GLUCOSE LOWERING DRUG USE ON OVERALL MORTALITY AMONG BREAST CANCER PATIENTS

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OBJECTIVES: This study assesses the effect of glucose lowering drug (GLD) use, i.e. metformin, sulfonylurea derivatives (SUs), insulin and other GLDs, started after breast cancer diagnosis, on overall mortality. **METHODS:** All female breast cancer patients diagnosed between January 1st, 1998 and December 31st, 2011 who started using GLDs after breast cancer diagnosis, were included. Clinical characteristics were derived from the Netherlands Cancer Registry, drug dispensing data from the PHARMO Database Network and data on overall mortality from the Dutch municipal personal records database. Time-dependent Cox regression analysis, with cumulative exposure to GLDs were conducted to assess effects on overall mortality. **RESULTS:** In total, 407 breast cancer patients were included. Most women (n=335, 82%) used metformin at some point during follow-up, followed by SUs (n=202, 50%), insulin (n=58, 14%) and other GLDs (n=41, 10%). The average follow-up was 7.7 ± 3.6 years and 107 (26%) patients died during follow-up. Adjusted analyses showed that metformin users had a lower overall mortality (HR=0.47; 95%CI:0.29-0.74), while insulin users had a higher overall mortality (HR=1.85; 95%CI:1.09-3.15) compared to non-users. However, when assessing dose-response effects no association was found between cumulative use of metformin, SU, insulin or other GLDs and mortality. **CONCLUSIONS:** GLDs were not associated with mortality among patients who started using GLDs after breast cancer diagnosis. We did observe a lower mortality among breast cancer patients using metformin and higher mortality among patients using insulin. However, as no dose-response relationship was observed, the found effects on mortality are likely to result from differences in patient characteristics that we could not adjust for and not from the drugs itself. Larger studies with longer follow-up among patients who start using GLDs after cancer diagnosis are needed to confirm our findings.

PCN12

MORTALITY REDUCTION FROM GASTRIC CANCER BY ENDOSCOPIC SCREENING: 6-YEARS FOLLOW-UP OF A POPULATION-BASED COHORT STUDY

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OBJECTIVES: To evaluate reduction whether endoscopic screening reduces mortality from gastric cancer, a population-based cohort study was performed in Japan, where both radiographic screening and endoscopic screening for gastric cancer have been conducted. **METHODS:** The subjects were selected from among participants in gastric cancer screening in 2 cities (Tottori and Yonago) from 2007 to 2008. The subjects were defined as participants aged 40-79 years with no gastric cancer screening in the previous year. Follow-up related to mortality was continued from the date of the first screening to the date of death or up to December 31, 2013. A Cox proportional hazards model was used to estimate the relative risks (RRs) of incident gastric cancer, gastric cancer death, all cancer deaths except gastric cancer death, and all-cause death except gastric cancer death. **RESULTS:** The subjects were 9,950 participants in endoscopic screening and 4,324 participants in radiographic screening. The endoscopic screening group showed a 67% reduction from gastric cancer compared to that of radiographic screening group (RR adjusted by sex, age group, and city of residence = 0.327, 95%CI: 0.117-0.905). The adjusted RR of endoscopic screening was 0.966 (95%: 0.674-1.385) for all cancer deaths except gastric cancer death and 0.932 (95%: 0.742-1.170) for all-cause deaths except gastric cancer death. **CONCLUSIONS:** The results of the present study suggest that endoscopic screening can decrease mortality from gastric cancer by 67% compared with radiographic screening. The results are consistent with the previous studies that showed that endoscopic screening reduces mortality reduction from gastric cancer.

PCN13

THERAPY OF DEPRESSION IN CANCER AND NON-CANCER PATIENTS IN GERMAN NEUROPSYCHIATRIC PRACTICES

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OBJECTIVES: It is known that patients with cancer are more at risk of becoming depressed. However, there is lack of information about how these patients are treated. The purpose of this study was to investigate if cancer patients are treated differently to non-cancer depression patients. **METHODS:** Using IMS® Disease Analyzer, patients were selected who were initially diagnosed with depression following cancer diagnosis between January 2004 and December 2013 from neuropsychiatrists (NP). Based on age, gender, health insurance and index year patients with prior cancer diagnosis were matched with a control group of patients who had no cancer diagnosis. The share of patients with a medical therapy within one year after depression diagnosis and the proportion of patients treated with tricyclic antidepressant (TA), selective serotonin reuptake inhibitors (SSRI), serotonin and norepinephrine reuptake inhibitors (SSRNI) or benzodiazepines (BZD) were analyzed. **RESULTS:** The study population consisted of 604 depression patients with and 604 without cancer (mean age 63.8 years, 36.5% male, 6.0% with private health insurance). In the cohort of cancer patients 27.6% had a breast cancer, 13.3% malignant neoplasms of lymphoid or hematopoietic tissue, 12.5% brain tumor, 8.3% prostate cancer, 10.0% cancer of digestive organs. 66.5% of patients with cancer and 72.8% without cancer received prescriptions of antidepressant drug (p=0.017). There were no significant differences in shares of SSRI/SSRNI (32.7% of cancer and 34.1% of non-cancer patients). TA were given less often in cancer patients (31.2% versus 38.2%, p=0.011), BZD slightly more often in cancer patients (7.0% versus 4.2%, p=0.033). **CONCLUSIONS:** Our studies showed that cancer patients receive slightly less and different antidepressant drug treatment than non-cancer patients. In further studies it should be analyzed what the reasons for the treatment decisions and what the patient health outcomes are.

PCN14

LONG-TERM TRENDS IN DESCRIPTIVE EPIDEMIOLOGY OF MALIGNANT MELANOMA IN THE SLOVAK REPUBLIC

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OBJECTIVES: The latest available national data from the Slovak Republic (SR) are for year 2008. The objective of this paper was to analyze and prospectively predict long-term national trends of malignant melanoma (MM) incidence, mortality, clinical stages and prevalence to obtain more actual data for the purpose of cost-of-illness studies and budget impact analysis in the SR. **METHODS:** Time-trends of national data on incidence, mortality, clinical stages and prevalence of MM in 1968-2008 were analyzed by using joint-point regression (Version 4.1.1.5). The data were predicted to the current year 2015. The trends are presented with a corresponding 95% Confidence Intervals (CI) and p-value with null hypothesis being constant with time. **RESULTS:** Epidemiological trends: In males (y.2008), MM age-standardized incidence represented 9.0/100,000 (n=315 cases, mean age=63.8 y), with the last annual percentage change (APC) of 5.3% in 1995-2008 (95%CI=3.5-7.1, p<0.0001), estimated incidence for 2015 is 13.49/100,000 (95%CI ±0.637). Mortality in 2008 represented 2.3/100,000 (n=85) with the last APC 2.2% (95% CI=1.6-2.8, p<0.0001), estimation 2015 is 3.15/100,000 (95%CI ±0.159). In females (y.2008), MM incidence was 7.5/100,000 (n=330, mean age=60.27 y), with the APC 3.5% (1968-2008, 95%CI=3.1-3.8, p<0.0001), estimation 2015 is 10.55/100,000 (95%CI ±0.164). Mortality in 2008 represented 1.5/100,000 (n=74), APC 0.53% in 1988-2008 (95% CI=-0.6-1.6, p=NS), estimation 2015 represents 1.73/100,000 (95%CI ±0.378). National prevalence in 2015 for both sexes represents 8.626 cases. We estimate 65.6% patients diagnosed in the 1st clinical stage, 22.44% in the 2nd, 1.54% in the 3rd, 6.03% in the 4th and 0.18% in the undefined clinical stage. The number of cases in the 1st stage is increasing during the time, however, the 4th stage remains stable. **CONCLUSIONS:** Actual data on prevalence and clinical stages of MM in the SR can be used as the source for setting the size of population in cost-of-illness studies and budget-impact analysis.

PCN15

PATTERNS OF METACHRONOUS METASTASES AFTER CURATIVE TREATMENT OF BREAST CANCER

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