

using electronic hospital records. Survival was assessed using the Kaplan-Meier estimator. Recurrence patterns were investigated by type of first recurrence and time-to-recurrence. A multivariate cox regression was used to analyze whether time-to-recurrence was associated with gender, age and tumor thickness. Emigrated patients (n=10) and patients with an unknown recurrence status (n=144) were excluded. **RESULTS:** Of all 817 patients, 111 patients (13.6%) experienced disease progression (median follow-up: 5.5 years). Patients who developed a recurrence had a lower survival compared to patients who did not developed a recurrence (median OS: 9.4 years versus median has not yet been reached; 5-year survival rate: 69.9% versus 96.6%; $p < 0.001$). The most frequent type of first recurrence was lymphatic (36.9%), followed by distant (22.5%), local (21.6%) and intralymphatic (9.9%), respectively. The median time-to-recurrence has not yet been reached; however, in case of a recurrence, the median time-to-recurrence was 2.5 years (minimum: 0.01 years; maximum: 9.8 years). The time-to-recurrence was not statistically significantly associated with gender (HR=0.81; $p=0.29$), age (HR=1.01; $p=0.38$) and tumor thickness (HR=1.03; $p=0.76$). **CONCLUSIONS:** Long-term surveillance of stage IB melanomas is of utmost importance, because survival subsequent to recurrence is much lower than expected. The risk of developing a recurrence was substantial; however, the time-to-recurrence was not associated with gender, age and tumor thickness.

PCN30 EPIDEMIOLOGY OF PATIENTS WITH METASTATIC CASTRATE RESISTANT PROSTATE CANCER IN EUROPE AND AUSTRALIA

Marteau E¹, Gimonet G¹, Gabriel S², Dinot J¹, Flinois A³, LE Cleac'h JY³
¹IPSEN Pharma, Boulogne-Billancourt, France, ²IPSEN Pharma, Boulogne Billancourt, France, ³Kantar Health, Paris, France

OBJECTIVES: The objective of this study was to evaluate both the incidence of metastatic Castrate Resistant Prostate Cancer (mCRPC) and the number of mCRPC patients who receive specific mCRPC treatments (mCRPCTT): chemotherapy and second generation Hormone Therapies (ADT manipulations were not included). **METHODS:** This study was conducted in 8 European countries and Australia. The incidence of mCRPC patients was assessed using several sources: national cancer registries, a literature review and an ad-hoc chart review where 292 oncologists, 76 onco-radiotherapists and 357 urologists reported information about 4171 prostate cancer patients. Of these, 2401 had metastatic castrate resistant disease. Patient characteristics and treatments received were assessed and reported separately by country. **RESULTS:** Across all 9 countries, 76 200 new patients were diagnosed mCRPC over the past year. Of these patients, 35% (26 400 patients) went to supportive care without receiving any mCRPC TT while 65% (49 800 patients) received a 1L mCRPCTT. Prior to receiving any 1L mCRPCTT, 43% of patients had ADT manipulations during a short transitional period (median duration = 1 month). Of the 49 800 patients who received a 1L mCRPCTT, 59% (29 250) went to a 2L mCRPCTT, 15% deceased during or just after the 1L TT and 26% went on to receive supportive care only. Of the 29 250 patients who received a 2L mCRPCTT, 46% (13 500) went to a 3L mCRPCTT. **CONCLUSIONS:** Our methodology enabled us to assess incidence figures and the volume of mCRPC patients who receive specific mCRPCTT: over one-third of mCRPC patients did not receive any mCRPCTT. Among the 65% who received a 1L TT, 59% receive a 2L mCRPCTT.

PCN31 COMPARISON OF EPIDEMIOLOGY AND DRUG TREATMENT IN HER2 NEGATIVE METASTATIC BREAST CANCER (MBC) IN EU5

Nersesyan K¹, Robinson D², Pomerantz D²
¹Kantar Health, St Louis, MO, USA, ²Kantar Health, New York, NY, USA

OBJECTIVES: Explore differences/similarities in epidemiology and drug treatment of metastatic breast cancer (MBC) in EU5. **METHODS:** All data was derived from the Kantar Health CancerMPact database, sources for which include country specific cancer registries, published scientific studies and proprietary physician surveys comprising 85 doctors seeing 9,255 patients per month. Age and gender specific incidence rates, annual stage specific progression rates and annual stage specific survival rates are used to calculate total number of surviving patients at a specific stage up to 10 years after diagnosis. **RESULTS:** Prevalence of BC ranged between 41-73 per 100K population across EU-5. Among BC patients, prevalence of MBC was similar: 8% (UK, Italy) to 10% (Germany, France, Spain). Overall 62% of MBC patients were diagnosed with HER2-negative disease (56% Germany-70% France). Among these patients 35-40% had active disease and were treated with chemotherapy. Patients with triple negative disease had had fewer lines of treatment than did not triple negative. Patients who are HER2-negative generally receive between two and three lines of chemo therapy on average. Second line chemotherapy regimens varied. Capecitabine was the most common therapy (mono and combination) in all countries ranging from 36% (UK) to 40% (Germany). 2nd and 3rd most common therapies were vinorelbine (23%-26%) and paclitaxel (20%-23%) in Germany, Italy and Spain vs. docetaxel (18%-34%) and paclitaxel (11%-19%) in UK and France. In third line, the most commonly used agents were capecitabine (16%-44%) and vinorelbine (18%-26%). Eribulin was used in second line (3%-6%) and third line (11%-19%) in all countries except for Spain. **CONCLUSIONS:** Capecitabine is the most utilized chemotherapeutic agent in the second and third lines chemotherapy in Western Europe for HER2-negative patients. A variety of other regimens, primarily monotherapies, may also be used in later lines, including vinorelbine, gemcitabine, eribulin, and docetaxel.

PCN32 ASSOCIATION OF DIABETES AND CANCER DIAGNOSIS IN PRIMARY CARE PRACTICES IN FRANCE

Grandfils N, Ricarte C, Solomiac A
IMS Health, PARIS LA DEFENSE, France

OBJECTIVES: Several studies suggest that diabetes carries an increased risk for a number of different cancer types. The aim of this study was to investigate the incidence of 14 different cancer types in the diabetic and non-diabetic popula-

tion. **METHODS:** IMS Disease Analyzer™ (DA) database was used, focusing on patients with or without diabetes in general practice in France. The analysis was performed retrospectively from 2001 to 2013. The Hazard Ratios (HR; Cox regression) for the risk of cancer in diabetic versus non-diabetic patients were adjusted for demographic and clinical variables. IMS Oncology Analyzer™ (OA) database was also used to describe the cancer patient profile in 2013. **RESULTS:** Overall 3.1% of patients in DA are diabetic. 75,104 patients were diagnosed with type-2 Diabetes Mellitus (T2DM). This population was matched to a control group in terms of age (60±15 years) and gender (male: 52%). The overall risk of cancer was lower in T2DM patients than in patients without diabetes (HR: 0.81; CI: 0.76 to 0.85). Those patients were less likely to develop breast, prostate, lung cancer or non-hodgkin lymphoma. Nevertheless, their risk was significantly higher regarding liver cancer (HR: 1.99; CI: 1.46 to 2.72), pancreatic cancer (HR: 2.13; CI: 1.51 to 3.00) and endometrial cancer (HR: 1.25; CI: 1.01 to 1.55). No significant increase in risk was observed in colorectal, stomach, kidney, thyroid, urinary bladder, gall bladder and oesophageal cancer. OA showed a higher proportion of diabetic patients among the cancer population (14.6%, n=10,621). Consistently, this rate was even higher in patients diagnosed with pancreatic (28.7%, n=362), liver (27.0%, n=256) and endometrial cancer (21.7%, n=161). **CONCLUSIONS:** This retrospective analysis showed that T2DM may increase the risk of certain cancer types but seems to prevent from some others. Further research is required to evaluate the factors involving the diabetes-cancer correlations, such as the anti-diabetic drugs.

PCN33 PATIENT COUNT PROJECTIONS FOR ADVANCED MELANOMA BY LINE OF THERAPY AND OTHER CLINICAL CHARACTERISTICS IN EU COUNTRIES: RESULTS FROM THE UK, GERMANY, FRANCE, ITALY AND SPAIN (EU-5)

Gueron B¹, Kish JK², O'Day K², Martel MJ², Manley Daumont M¹
¹Bristol-Myers Squibb, Rueil Malmason, France, ²Xcenda, LLC, Palm Harbor, FL, USA

OBJECTIVES: To forecast the number of advanced melanoma (AM) patients (Stage III unresectable and Stage IV) newly initiating treatment over 5 years (2014-2018) by line of therapy and clinical/tumor characteristics including BRAF/PD-L1 mutations status and rate of brain metastases. **METHODS:** A patient count model was developed to forecast the AM population using historical rate data (1991-2012) and other population parameters including incidence rate annual percent change, stage at diagnosis, rates of disease progression and survival obtained through a comprehensive literature review and hand-search of cancer registry websites. Analysis of a cross-sectional sample (Ipsos Global Oncology Monitor) of 1,297 patients in the EU-5 was used to address any clinical data gaps. The model was validated by comparing projected 5-year prevalence rates to GLOBOCAN 2012 estimates. **RESULTS:** The model-projected number (rounded to nearest 100) of incident melanoma cases for 2014 was: Germany= 23,100; UK=18,900; France=12,400; Italy=12,000; Spain=5,800. Of incident cases, 11.3%-13.0% were treatment eligible AM. Incidence rates increases of 1.7-7.8% per year were applied based on historical trends. Analysis of IPSOS data and review of the literature showed BRAF and PD-L1 prevalence rates of 45.4%-56.2% and 15.9%-16.7%, in AM patients, respectively. Literature-derived, brain metastasis prevalence ranged from 15.9-36.0% in Stage IV patients. Considering case progression, resection and adjuvant treatment rates, the forecasted number of AM patients eligible for 1st and 2nd line treatment in 2018 is, respectively: Germany=3,700 and 1,700; UK=3,100 and 1,400 France=1,900 and 500; Italy=1,800 and 1,000; Spain=1,100 and 400, representing approximately 10.8-12.0% of incident cases. **CONCLUSIONS:** While melanoma incidence is projected to increase over the next 5 years the majority of incident cases will be diagnosed in earlier disease stages. Under these assumptions, the largest proportion of the incident melanoma population that is AM patients initiating treatment is expected to be 12% in 2018, a slight decline from 13% in 2014.

PCN34 A VALIDATED PREDICTION MODEL AND NOMOGRAM FOR RISK OF RECURRENCE IN EARLY BREAST CANCER PATIENTS

Witteveen A¹, Vliegen IMH², Siesling S³, IJzerman M⁴
¹University of Twente, MIRA Institute for Biomedical Technology & Technical Medicine, Enschede, The Netherlands, ²University of Twente, Centre for Healthcare Operations Improvement and Research (CHOIR), Enschede, The Netherlands, ³Comprehensive Cancer Centre the Netherlands (IKNL), Utrecht, The Netherlands, ⁴MIRA Institute for Biomedical Technology & Technical Medicine and University of Twente, Enschede, The Netherlands

OBJECTIVES: The objective of this study is to develop and validate a conditional logistic regression model for the prediction of locoregional recurrence (LRR) of breast cancer. To make a translation to clinical practice a web based nomogram was made. **METHODS:** Women first diagnosed with early breast cancer (without distant metastasis or ingrowth in the chest wall or skin) between 2003-2006 were selected from the Netherlands Cancer Registry (n=39,929). Risk factors for LRRs within five year of the primary treatment were determined using logistic regression. Risks were determined per year, conditional on not being diagnosed with recurrence in the previous year. The presence of interaction and collinearity in the nomogram was assessed, as well as the discrimination by means of the area under the ROC curve and calibration by the Hosmer-Lemeshow goodness-of-fit test in deciles. Data on primary tumours diagnosed between 2007-2008 from a selection of Dutch hospitals was used for external validation of the performance of the nomogram (n=13,792). **RESULTS:** The final model included the variables grade, size, multifocality, and nodal involvement of the primary tumour, type of surgery, and whether patients were treated with radio-, chemo- or hormone therapy. The modelling group showed an area under the ROC curve of 0.82, 0.74, 0.67, 0.70 and 0.60 respectively per subsequent year after primary treatment. The calibration was sufficient. All effects in the validation group were in the same direction, and the estimates in the validation group did not differ significantly from the modelling group. **CONCLUSIONS:** This validated nomogram can be used as an instrument to aid clinical decision-making and to identify patients with a high risk of breast cancer recurrence who might benefit from a more intensive follow-up after breast cancer.