cases diagnosed in 2005, residents in Lisboa e Vale do Tejo, Alentejo, Algarve and Região Autónoma da Madeira were included. Data from clinical charts and from The South Regional Cancer Registries database was collected regarding epidemiological factors (e.g. ethnicity, number of gestations), socio-demographic factors (e.g age at diagnosis, residence), tumour's topographic characteristics, histologic diagnosis, tests for diagnosis and staging, stage, time elapsed between diagnosis and treatment, characteristics of treatment (surgical treatment, cytostatic treatment, radiotherapy, hormonal treatment, molecular therapy) and vital status.
Results: A total of 1021 patients have been included in this study so far from 13 portuguese centers. 56% of our patients were between the ages of 50 and 75 years. 52% of the patients had left breast cancer, with only a minority (1.2%) presenting with bilateral breast cancer. The most frequent morphology was Invasive Ductal Carcinoma accounting for 74.4% of all cases, and 42% of the cases were moderately differentiated. 38.3% of the patients presented with stage I disease, 36.2% with stage II, 17.3% with stage III and 8.0% with stage IV. When analyzing survival, we observed a correlation between survival and stage at diagnosis, and between survival and geographical region.
Discussion: Our preliminary data indicates that there are differences in survival of female breast cancer, with an association between survival and geographical region. Ongoing studies are clarifying the factors responsible for these variations, namely differences in clinical practice. These results will help defining new strategies to improve survival in Portuguese breast cancer patients.

3502 POSTER

Triple Negative Breast Cancer − Does Age or Stage Impact on Survival? This Abstract Reflects a Subset Analysis of Taxpas − a South African Resource Utilization Survey of Cancer Patients Treated With Taxotere® (Docetaxel) in the Private Health Sector

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Background: Triple-negative breast cancer is a subtype of breast cancer that is clinically negative for expression of estrogen and progesterone receptors (ER/PR) and HER2. It is characterized by aggressive behavior, distinct patterns of metastases, and lack of targeted therapies. Although sensitive to chemotherapy, early relapse is common. In 2009, according to the Cancer Research UK, TNBC accounts for approximately 15% of all breast cancer cases. Population-based studies have shown lower breast cancer-specific survival rates among those with triple-negative compared to non-triple-negative disease.
Methods: Sanofi-aventis South Africa conducted Taxpas; an open label multicentre survey done in a local community based setting in the private health sector. The primary objective of the survey was to assess the total cost of a patient treated with Taxotere® with a secondary objective of survival. Nationally 125 oncologists from 46 centres enrolled 2147 patients over a 6 year period. There are 1632 breast cancer and 507other cancer patients. Interim data of the first 789 validated breast cancer patients is available. The following is an analysis of this population.
Results: The average age was 51.2 years. At first diagnosis 419 (57.2%) patients presented with early breast cancer and 313 (42.8%) patients presented with metastatic breast cancer with a 1 year survival of 381 (97.4%) and of 195 (65%) patients respectively. For survival we report it as per receptor status; ER, PR and HER-2. The most interesting find was when all three receptors were negative, which fits the definition of the triple negative breast cancers. The total number of patients in this group was 118 (15%) of the total breast cancer patients. 80% of this population received Taxotere® as a single agent with a survival 82% at 1 year.

	Survival (%)			
	TNBC, 118 (110)		Non TNBC, 660 (621)	
	⩽50: 60 (56)	>50: 58 (54)	⩽50: 311 (294)	>50: 349 (327)
EBC	98	96	99	96
MBC	38	63	80	60

This triple negative receptor population fits into the incidence of triple negative breast cancers globally i.e. of 15−20% of breast cancer patients.
Conclusion: We were able to delineate the incidence of triple negative breast cancer incidence in this South African cohort and demonstrate their survival.

3503 POSTER

Retrospective Analysis of Epidemiological and Treatment Outcome in Patients With Metastatic Lung Cancer at an Oncologic Institution in Southern Brazil

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Background: In Brazil lung cancer is the third most common malignancy with 27,630 new cases estimated for the year 2010, divided in 17,800 men and 9,830 women. There is an increasing incidence in Brazil, especially in females, which is attributed to increased smoking habit in this gender. The aim of this study was to identify in our population the epidemiological profile of patients with non-small cell lung cancer (NSCLC) in advanced stage and confront the results of treatment with the data in the literature.
Methods: This retrospective study included 125 patients referred to the Clinical Oncology Service of our hospital, with NSCLC in stage IIIB with pleural effusion and IV and tried to identify the epidemiological characteristics, risk and prognostic factors and the results obtained with treatment through survival analysis using the Kaplan–Meier method.
Results: Of 125 patients enrolled, 52.8% were male, median age 58 years, performance status (PS) less than 1 in 61.3%, weight loss greater than 10% in 83.3% and subtype adenocarcinoma in 59.2% of cases. Most of the patients (83.2%) were smokers or former smokers at diagnosis and the most common initial symptoms were chest pain (76.5%) and cough (69.9%). Bone and brain metastases were detected in 29.6% and 21.4% at diagnosis, respectively, similar to that found in the literature. Among the 104 patients assessable for response, the partial remission rate was 31.7% and the stable disease rate was 16.3%. Patients were treated with carboplatin-paclitaxel in first line in 88.6% and docetaxel in second line in 47.1%. The median survival was 8.3 months (95% CI 6.5 to 10.1 months) and there was a significant statistical difference in median survival between patients with performance status less than 1 versus those equal or greater than 2 ($p = 0.014$).
Conclusion: An equal incidence between sexes reflects the increasing number of cases in females following the statistics worldwide. Smoking is still the most prevalent risk factor and is more associated with the epidermoid histological subtype. In our population, the number of cigarretes smoked per day was high although the most common subtype was adenocarcinoma, in accordance with the statistics of growing incidence of this subtype. Overall survival was similar to that found in the world literature. This study shows the epidemiological profile of patients with lung cancer in a Southern Brazilian population and the impact of prognostic factors in treatment outcome.

3504 POSTER

Understanding the Variation in the Treatment Patterns for Newly Diagnosed Metastatic NSCLC Patient Among EU-5 Countries

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Background: The differences in country-specific treatment patterns across Europe in non-small cell lung cancer (NSCLC) patients have not been extensively studied. This study examined treatment choices between various lines of therapy (LOT) in clinical practice in the EU-5 countries among newly diagnosed stage IV NSCLC patients.
Methods: The IMS LifeLink™ Oncology Analyzer (OA) database, based on surveys of practicing oncologists, was used to identify all NSCLC patients aged ⩾18 years diagnosed at stage IV. The study compared the proportion of stage IV patients among the countries at various lines of therapy (LOT). Treatment options categorized as drug only, radiotherapy, surgery, or any combination of these, were compared. In addition, drug only treatment was stratified to include chemotherapy-only, biologics-only or chemo+biologics. Finally, we investigated whether the chemotherapy was used as monotherapy or as doublet/triplet for the various LOT.
Results: Between Jan-2009 to Jun-2010, 249,387 NSCLC patients were newly diagnosed at stage IV in the EU-5 countries. Of these, Germany had the most (71,758) followed by Italy (54,882), UK (53,453), France (39,765) and Spain (29,530). Compared to 73% of patients in UK, 94% (France), 89% (Germany), 86% (Italy) and 89% (Spain) of the newly diagnosed stage IV patients had ⩾1 LOT. In UK, <1% of the patients had ⩾3 LOT compared to 5% in France and Germany, while 2% each in Spain and Italy. In 48% of the EU patients, the first LOT included a combination (48%), followed by chemo-only in 45% of patients. In all EU-5 countries, chemotherapy was the first choice in first line (75%) while targeted/biologics-only was mostly preferred in second and third lines (64% & 59%, respectively). UK showed higher use of chemotherapy in first

line (84%) and biologics in second and third lines (80–100%) compared to other EU-5 countries. In the first line chemotherapy-only patients, 84.9% were on a doublet/triplet therapy, while this reduced to 20%, 22% and 16% in second, third and fourth lines, respectively. UK differed in the use of doublet/triplet from other countries − 92% in first line, 16% in second, and none in third and fourth lines.
Conclusion: Combination therapy is predominantly used in first line. Chemo-only therapies are used frequently in first line while targeted therapies dominate second and third lines. In most findings, UK differed from the other EU-5 countries.

3505 POSTER

Anti-oestrogen Therapy for Breast Cancer Modifies the Risk of Subsequent Cutaneous Melanoma

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Background: Increased risk of subsequent cutaneous malignant melanoma (CMM) after a first cancer is a common observation and has been attributed to better medical surveillance or/and to anti-cancerous treatments. Several studies suggested that oestrogens could be a risk factor for CMM. If this is true, use of anti-oestrogens should be associated with a decreased risk of CMM. We compared CMM incidence in a cohort of breast cancer patients with and without anti-oestrogen therapy.
Material and Methods: The cohort consisted of 7,360 breast cancer patients recorded between 1980 and 2005 at the Geneva Cancer Registry and followed until December 2008. Among these women, 54% (3,358) received anti-oestrogens. We compared CMM occurrence among patients with and without anti-oestrogens with that expected in the general population using age and period Standardized Incidence Ratios (SIRs).
Results: After a mean follow up of 7.5 years, 34 women developed a subsequent CMM. Compared with the general population the risk of CMM was higher for patients who did not receive anti-oestrogens treatment (SIR: 1.60, 95% confidence interval [CI]: 1.08–2.12, p = 0.02). On the contrary, the risk was close to 1 (SIR: 0.98, 95% CI: 0.40–1.56, p = 0.572) for patients who received anti-oestrogens.
Conclusions: This study shows that anti-oestrogen therapy modifies the risk of melanoma after breast cancer and further supports the hypothesis that oestrogens could play a role in melanoma occurrence.

3506 POSTER

Clinical Characteristics and Outcome of Treatment of Brazilian Women With Breast Cancer Treated at Public and Private Institutions

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Background: Breast cancer is the most common type of cancer among Brazilian women with almost 50.000 new cases per year. There are few data regarding the clinical presentation, treatment and specially outcome of this population. Brazilian health system is composed by Public institutions (Pu), Private centers (Pr) and some institutions that assist both Public and Private patients (PuPr).
Material and Methods: We collected data from 17 cancer centers distributed throughout Brazil among Pu; Pr and PuPr centers. We've analyzed: 1-clinical characteristics, 2- pathologic characteristics and 3-type of treatment received among 2435 patients from May 2008 to May 2009.
Results: Mean age at diagnosis was 53 years, with about 30% below age 50. Most of the cases were Invasive Ductal Cancer (83%). Stage 0 was seen in 3.2%, Stage I in 21.8%, Stage II in 46.6%, Stage 3 in 24.6% and Stage IV in 3.9%. Clinical Stage III + IV was seen in 18.5% of the Pu institutions, only 3.7% of the Pr ones and 6.2% among PuPr. Hormone receptors were positive in 55%. Her-2 was overexpressed in 27.3% of the patients, and triple negative were seen in 11.6%. Most of the patients were submitted to surgery (92.9%). In Pu institutions only 36% of the patients were submitted to Breast Conserving Surgery (BCS); in the Pr institutions 49.4% of the patients and in the PuPr 47%. Breast reconstruction was made in 15.8% and did not differ between Pu and Pr institutions. Sentinel node biopsy was done in 30.6% of the patients (26.8% of the patients from the Pr institutions and 26.8% of the Pu ones and 33% among PuPr). Neoadjuvant treatment was done in 21.5% of the patients (Pu = 27.2%; Pr = 13.9% and PuPr = 13.2%). Most of this neoadjuvant treatment was chemotherapy (93.8%) and only 4.3% was hormone therapy (HT). 30% of the patients received AC, 41% A+taxane and 18.9% FAC/FEC. Only 1.1% of the patients received trastuzumab in the neoadjuvant setting. Tamoxifen was used in 48.3% when neoadjuvant HT was done, and aromatase inhibitor (AI) was used in 34.5%. Most of the patients received any kind of adjuvant treatment (89.2%). Chemotherapy was done in 76.6% and hormone therapy in 69.8%. When chemotherapy was used the most common regiment was FAC/FEC (27.3%), followed by CMF (17.5%) and AC (11.9%). Trastuzumab was use in only 5.8% of the patients (Pu = 6.8%, Pr = 18.3% and PuPr = 3%). Tamoxifen (TAM) was prescribed in 69.8% of the cases (Pu = 87.6%, Pr = 79.6% and PuPr = 78.8%), AI in 8.2% (Pu = 5.9%, Pr = 9.3% and PuPr = 13.8%), and sequential TAM/AI in 6.6% (Pu = 6.1%, Pr = 8.3% and PuPr = 6.4%). About 17% of the patients had metastasis and the most common ones were bone lung and liver.
Conclusions: There are important differences between the public and private institutions in Brazil, the patients from the Pu institutions were five times more likely to be diagnosed in stage III or IV, they usually receive neoadjuvant treatment, and when surgery was done, most of them were treated with radical procedures. Besides the overexpression of Her-2 (30%) a minority of the patients received treatment with trastuzumab even for the Private centers (high cost for a developing country).

3507 POSTER

Thyroid Cancer and Multiple Primary Tumours in the Belorussian Cancer Registry

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Background: Thyroid cancer incidence rates have started increasing sharply in the Belarus since 1986 when Chernobyl disaster happened. Radiation exposure of I^{131} at a young age is a strong risk factor, but otherwise the etiology is unclear. We studied the risk of thyroid cancer after an earlier primary cancer, as well as the risk of developing multiple primaries after an earlier thyroid cancer in Belorussian cancer patients from 1990 to 2007.
Materials and Methods: Cases were identified from records of the Belorussian National Cancer Registry and followed for multiple primary cancer development till 2008. Proportions and Standardized Incidence Ratios (SIR) of synchronous and metachronous primary multiple thyroid cancers (PMTC) were investigated. Only double combinations were considered (971 PMTC cases: 181 males and 790 females).
Results: In males the highest significant risk of metachronous PMTC was established for combination with Hodgkin's lymphoma (SIR = 18.1; 95% CI 7.8−35.5 − when Hodgkin's lymphoma developed first and SIR = 8.6; 95% CI 2.3−22.0 − when Hodgkin's lymphoma developed secondary). Similar situation was observed for females (SIR = 5.5; 95% CI 2.7−9.8 − when Hodgkin's lymphoma developed first but no cases of PMTC when Hodgkin's lymphoma developed secondary). Apart Hodgkin's lymphoma significantly high risk of secondary cancer was noted for tumours of kidney, rectum and leucosis in males and of lung, kidney, breast, corpus uteri, colon, skin, melanoma and leucosis in females. Significantly high SIR were found for PMTC after tumours in kidney, larynx, pharynx, colon, after melanoma, leucosis in males and after neoplasms of kidney, pharynx, breast, lung, melanoma, bones and leucosis in females.
Conclusions: High association of thyroid cancer with Hodgkin's lymphoma, leucosis, kidney cancer and bones sarcomas could be an evidence of radiation impact (due to treatment or due to environment). High level of synchronous diagnosis of tumours located near thyroid gland could be caused by more intensive medical attention to that area.

3508 POSTER

Solid Cancer Incidence in the Republic of Belarus (1970–2010) − 16 Years Before and 25 Years After Chernobyl Accident

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Background: Despite of many studies of the relation between huge radiation contamination by different radioactive elements and changes of cancer incidence rates in Belarus, the question on the outcome of this disaster has not still lost its actuality.
Methods: The data of obligatory cancer registration were studied for the past 41-years. Age Standardized Incidence Rates (ASR_{World} per 100 000) in