

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.

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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.

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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 regimen was FAC/FEC (27.3%), followed by CMF (17.5%) and AC (11.9%). Trastuzumab was used 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).

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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 <sup>131</sup>I 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.

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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<sub>World</sub> per 100 000) in