cycles with either of the two chelates. One treatment cycle consisted of a 72 hours period of treatment with a 25 mM drug concentration followed by 72 hours of cultivation in drug free medium. Cell proliferation was followed for 4 treatment cycles. The Comet assay was used to investigate drug-induced DNA strand breaks and immunofluorescence microscopy and Western blot to investigate proteins involved in DNA repair.
Results: The cells were more sensitive to the Pd chelate than to the Pt chelate. The MCF-10A cells were less sensitive than the breast cancer cells to treatment with the chelates. Drug treatment induced changes in cell cycle kinetics with an S phase prolongation that was more pronounced in the cancer cells than in the normal cells. The normal cells were blocked in the G_1 phase of the cell cycle. There was more DNA damage in the cancer cells than in the normal cells. Western blot and immunofluorescence microscopy showed activation of Chk1 and gH2AX in drug-treated cells.
Conclusions: The breast cancer cell lines JIMT-1 and L56Br-C1 were more sensitive to treatment with $Pd_3NorSpd_2$ or $Pt_3NorSpd_2$ than the normal human MCF-10A cells. The compounds should be tested in animal models for their anticancer activity and they may have low genera toxicity.

5093 POSTER

The Estimated Cost of Trastuzumab for 25 Patients With Metastatic Breast Cancer − Methodology and Results of an Audit in Royal Wolverhampton New Cross Hospital NHS UK

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Background: This study was designed to accurately audit the duration of trastuzumab treatment in metastatic breast cancer in a single institution. Trastuzumab in combination with chemotherapy as first line treatment has increased the time to progression from 4.6 to 7.4 months and overall survival from 20.3 to 25.1 months. NICE approved the use of Trastuzumab for metastatic breast cancer in the UK in 2002. By the time the patients of this audit were treated, no data to justify treatment beyond progression had been reported.
Materials and Method: The data of patients on treatment with trastuzumab were provided by the New Cross Hospital pharmacy, for a 2-month period, January/February 2008, 1 year before the audit. A database was produced for the audit and patients were divided into adjuvant and metastatic (MBC). The details of treatment ware recorded for patients with MBC, from the initiation until the decision to stop, or death, or 09/02/2010, last date of audit follow up. The information was retrieved and cross-checked from all available sources: chemotherapy unit's electronic database (MOSAIC), the pharmacy data base, clinical letters and hospital notes. The patients on trastuzumab in the adjuvant setting were not followed further. For each patient with MBC we recorded: Demographics, previous adjuvant trastuzumab, total duration and doses of trastuzumab, chemotherapy type and duration, a cost estimation for trastuzumab for the whole period of treatment.
Results: During the 2-month period (Jan/Feb 2008), 46 patients were identified, 25/46 with MBC. The median age was 58.5 yrs (34.50–75.17). 15/25 were still alive at the cut-off date (9/02/2010) and 12 /15 continued treatment with trastuzumab. The reasons for discontinuation were: Poor PS or death:9/25, heart failure: 2/25, patient's decision 1/25, unclear MBC 1/25. No patient was discontinued from treatment because of disease progression only. The median duration of trastuzumab treatment was 30 months (3−50) and 20/25 patients were treated for >20 months. The median number of doses/patient was 44 and 9/25 patients were treated with different chemotherapeutic drugs concurrently with trastuzumab. The estimated cost of trastuzumab for 25 patients was £1,321,601. None of the patients was offered other HER2 targeted drugs.
Conclusion: This retrospective study shows that despite lack of hard evidence, the trend of clinical decision was to offer trastuzumab beyond progression to HER2 positive patients with MBC. The cost of this decision is unprecedented.

	Total	Min	Max	Median
Age(years)		34	75	58
Alive	15			
Continue Trast	12			
Duration of Trast (months)	751	3	50	30
3/weekly doses (number)	1085	5	72	44
Dose per pt(mgr)				450
Estimated cost for 25 pt (£)	1,321,601			

5094 POSTER

Prognostic Factors of Triple Negative Breast Cancer − Still a Lot to Know

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Background: Triple negative breast cancer (TNBC) is defined as a subtype that is negative for estrogen receptor, progesterone receptor, and human epidermal growth factor receptor 2 (HER2). There is a growing evidence of the heterogeneity of such entity on the molecular level that may cause discrete outcomes. The aim of this study is to determine prognostic factors in such type of breast cancer.
Methods: We retrospectively analyzed the clinicopathologic features of 363 TNBC cases which were diagnosed in Kuwait from July 1999 to June 2009. The disease-free survival (DFS) and overall survival (OS) were analyzed by Kaplan–Meier method and correlated with known prognostic factors in univariate and multivariate analysis.
Results: The median age of was 48 years in which 24.2% were under 40 years. 57.2% had lymph nodes (LN) metastasis, 56.9% of grade III tumour and 21.5% of family history of breast cancer. 41.9% had stage II disease while 37.1% had stage III and 7.1% had IV. Lymphovascular invasion (LVI) was documented in 58.6% of patients. Menopausal status, tumour size, pathological subtype, nodal metastasis, type of surgery, number of dissected LN and LVI and type of chemotherapy were correlated with the DFS and OS. However, all these prognostic factors lost their significance in multivariate analysis.
Conclusion: Being TNBC in such is a bad prognostic factor. Other prognostic factors in cancer breast loss their significance in TNBC patients. There is a great need to identify new clinicopathologic and molecular prognostic factors in TNBC.

5095 POSTER

Prognostic Factors for Breast Cancer in Young Women

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Background: To study the relevance of certain clinical-morphological indicators for the prognosis of the disease.
Material and Methods: Data to be presented in the study are based on observation of 68 female patients with breast cancer diagnosis under 35, who underwent surgeries in the National Oncological Center of the Republic of Armenia in the period between 1995 and 2005. The youngest female patient was aged 23.
Results: The data demonstrate that the survival rate over 5 years is lower among patients with regional lymph node metastases (27.6% and 66.7% respectively, $P < 0.002$). This information allows us to identify the damage of regional lymph nodes as an extremely important predictor of the progression of the disease. The 5-year survival rate is also strongly correlated with tumour size. Tumours smaller than 2 cm were correlated with higher survival rates than tumours ranging from 2 to 5 cm (80%, 57.1%, and 33.3% respectively, $P < 0.05$). The most common histological type was invasive ductal carcinoma which made up (61.8%) in 42 out of 68 patients. Invasive lobular carcinoma in its pure form was detected in 10 patients (14.7%), mixed type of lobular and ductal carcinoma was detected in 16 women (23.5%). We observed such prognostically favorable histological types as mucinous carcinoma of the breast and glandular carcinoma that can be considered as one of the features for breast cancer in women under 35. The study also focused on the grade of gystological malignance for the prognosis of the disease. Its increase significantly shortened 5-year-long survival rate of the patients (88.1%, 48.2%, 23.3% respectively, $P < 0.05$).
Conclusions: To summarize, metastatic damage of the regional lymph nodes, the size of the tumour exceeding 2 cm, and the high grade of gystological malignance are very important predictors of the 5-year survival rate for young women with breast cancer. More than half of the patients in the study had metastatic damage of the regional lymph nodes, 54.4% of the young began treatment course with tumours larger than 2 cm. These numbers indicate also the low probability that patients will seek medical attention at early stages of disease, which is something characteristic of Armenia.