

ABCC11, ABCF2 and ABCG1). Finally, SNPs in *ABCB1* gene coding a prototypical anticancer drug efflux pump (rs1128503, rs2032582 and rs1045642) were estimated. The rs1128503 and rs1045642 SNPs were significantly associated with expression of ABCB1 and estrogen receptor in our previous study (Vaclavikova et al. *Pharmacogenet Genomics* 2008;18:263–273).

Conclusions: Our results revealed new candidate genes potentially causing the multidrug resistance of mammary tumour cells. Validation study on upregulated ABC transporters will be performed by absolute quantification in an independent patient cohort. The association of expression profiles with therapy outcome and disease-free survival will also be analyzed. In addition, new HRM method that seems to be rapid, accurate and low-cost as well as time-effective was developed for screening of functional *ABCB1* and analogously another ABC gene(s) SNPs. This work was supported by grants of Grant Agency of the Ministry of Health of the Czech Republic, grants no.: NS9803–3 and NS9799–4.

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POSTER

Breast Cancer in Young Woman in South of Morocco

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Background: The breast cancer is the first cancer of the woman in the world. it remains infrequent at the young woman. The objective of this study is to identify the epidemiological, clinicopathological and evolutionary features of breast cancer in young women at the oncology department of Mohammed VI University Hospital in Marrakech.

Materials and Methods: This retrospective study involved 154 young patients of 40 years old and less suffering from breast cancer, treated and followed up between January 2003 and December 2007.

Results: The mean age was of 35.1 years and 19 patients (12.3%) had familial history of breast cancer. Palpable tumour was found in 96.8% of cases with a clinical average size of 6 cm. Cancers were classified T1 in 17.8% of patient, T2 in 31.8%, T3 in 20.7% and 39.7% with T4. We found an invasive ductal carcinoma in 71.1% of cases, 97% were SBR grade II and III. The study of the operative specimen showed a axillary node invasion in 83 women (68.5%) and Hormone receptors were absent in more than 50% of case. The hormone therapy by tamoxifene was indicated at 53 patients associated in a castration by radiotherapy to four of them. The average length of the follow-up period was 39.6 months. We noticed that 34% of 103 women having a controlled disease at the end of treatment presented a relapse for an average time of 16.6 months. The global survival rate at 3 years was 66.1%.

Conclusion: With a high rate of relapse in our series, Prognosis appears unfavourable among young women with breast cancer in our region. Our results are consistent with those of the majority of published reports.

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POSTER

Clinical Outcome of Central Nervous System Metastases From Breast Cancer: Differences in Survival Depending on Systemic Treatment

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Background: Central nerve system (CNS) metastases are a feared complication of breast cancer and are associated with poor prognosis. The purpose of this study is to investigate the clinical characteristics of CNS metastases and to clarify the prognostic factors after CNS metastases in breast cancer at a single institution over a long time period.

Patients and Methods: We retrospectively reviewed the medical records of breast cancer patients diagnosed at Seoul National University Hospital from 1981 to 2009 and identified the patients who experienced CNS metastases. We collected the data including demographics, clinicopathologic characteristics, dates of diagnosis of original breast cancer and subsequent metastases, date of death and correlated the findings with the clinical outcome.

Results: Total of 400 patients were identified, 17 patients (4.3%) were diagnosed CNS metastases with primary breast cancer concurrently and 383 (95.7%) experienced CNS metastases subsequently after the diagnosis of primary breast cancer. 318 patients (79.5%) had brain parenchymal metastases only, 30 (7.5%) had leptomeningeal metastases only, and 52 (13%) had both. After the diagnosis of CNS metastasis, 170 patients (42.5%) received systemic chemotherapy (CTx) and 143

(35.8%) received CTx after whole brain radiation therapy (WBRT). The patients with good performance status (PS), initial CNS metastasis as recurrence, absence of extracranial metastases, non-visceral extracranial metastases, longer interval from the date of primary breast cancer to the date of CNS metastasis, CTx after WBRT and gamma-knife surgery (GKS) had better outcomes in univariate analyses. In multivariate analysis, good PS, systemic CTx after WBRT, GKS, and longer interval to CNS metastasis, were independent prognostic factors for overall survival after CNS metastases.

Conclusions: Our results suggest that appropriate palliative systemic therapy after WBRT or GKS, adequate palliative treatment via combined modalities are helpful for breast cancer patients, even after the detection of CNS metastases.

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POSTER

Re-irradiation Plus Hyperthermia for 415 Patients With Recurrent Breast Cancer in Previously Irradiated Area – the Amsterdam + Tilburg Experience

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Background: Treatment options for patients with locoregional recurrent breast cancer in previously irradiated area are limited. Four hundred and fourteen patients were treated with re-irradiation and hyperthermia (re-RT/HT) in the AMC (n = 301) and the BVI (n = 113) from January 1982 till January 2006. Response, locoregional control and toxicity were analysed as well as prognostic factors.

Patients/methods: All patients received extensive previous treatments, including surgery, chemotherapy and irradiation to a median dose of 50 Gy with or without boost. Median interval between initial treatment and re-RT-HT was 54 months (range 3–469).

The median age was 57 years at start of re-RT/HT. The estimated tumour size was >10 cm in 48% of patients, distant metastases were present in 36% and 74% had experienced 1–13 recurrence episodes, prior to the re-RT-HT. Re-RT consisted typically of 8x4 Gy, twice a week (AMC) or 12x3 Gy, four times per week, (BVI). Superficial hyperthermia was added once/twice a week using 434MHz CFMA antennas. Aim temperature: 41–43°C for one hour. Fifteen percent of patients received sequential chemotherapy and 30% sequential hormone therapy.

Results: Overall clinical response rate (cCR+cPR) was 84%. The infield 3-year local control (LC) rate was 25%. Tumour size, interval, previous recurrences and distant metastases (DM) were important prognostic factors. For patients with isolated locoregional recurrences ≤5 cm the 3-year LC rate was 47% (Table 1).

Median overall survival was 17 months. Acute ≥ grade 3 toxicity occurred in 24% of patients. The actuarial late ≥ grade 3 toxicity rate was 23% at 3 years.

Table 1

Tumour size	cCR (%)		3-y LC (%)	
	Isolated	With DM	Isolated	With DM
0–5 cm	86	54	47	22
5–10 cm	65	40	29	22
>10 cm	58	36	21	11

Discussion and Conclusion: The combination of re-irradiation and hyperthermia results in high response rates despite extensive disease. Early referral is needed to achieve long term locoregional control. Currently a randomized study of RT-HT versus RT-HT and CisDiamineDichloroPlatinum is performed to further improve results.

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POSTER

Baseline Characteristics, Disease Pattern and Outcome of Breast Cancer Patients With Asymptomatic Bone Metastasis

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Background: Nearly 30–70% of all cancer patients develop bone metastasis. There is enough clinical evidence for the role of ionizing radiation in symptomatic bone metastasis. However, nearly 20% of patients