

The odds of NAT1\*14A allele clustering was 16.83 times higher in cases than controls. Allele genotype interaction with occupational exposure to fumes/vapors was found, however, not statistically significant.

**Conclusion:** This is the first case-control study on bladder cancer in the Middle East. It suggests a potential of gene-environment interaction. The observed results should be taken into consideration when setting national priorities to improve the prevention and management of this condition in Lebanon.

## 3532

## POSTER

### Uptake of Prophylactic Mastectomy And/or Salpingo-oophorectomy Among Spanish BRCA Mutation Carriers

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**Background:** The aim of the study is to evaluate the uptake of prophylactic mastectomy (PM) and/or prophylactic salpingo-oophorectomy (PSO) in BRCA1 and BRCA2 female carriers. A secondary objective is to determine the clinical predictors associated with any type of prophylactic surgery.

**Material and Methods:** One hundred and forty six women between 20 and 75 years old with an identified BRCA1 or BRCA2 mutation were included. These women did not have a previous cancer history, except for breast cancer. Medical and demographical data were collected in our high risk clinics between July 2005 and March 2011. This information was registered in our clinical database. Prophylactic surgery uptake was analyzed from time of genetic testing to current date. One hundred and thirty seven were eligible for analysis of PM and 111 were eligible for PSO. Univariate analysis was performed to evaluate the association between clinical and demographic characteristics and prophylactic surgery with SPSS v15.0.

**Results:** Median age was 44 years (20–74), 98 women (67%) had children and 61 (42%) were postmenopausal. Half of women were BRCA1 carriers and half were BRCA2. Ninety two women (63%) had a personal history of breast cancer, and 138 (94.5%) had a familial breast or ovarian cancer history. Out of 146 individuals, 98 (67%) opted for any prophylactic surgery. PM was chosen by 25/137 (18%) women at a median age of 39 (26–61) with a median time from genetic testing until PM of 7 months (1–66). PSO was chosen by 73/111 (66%) at a median age of 48 (33–71), and median time from genetic testing until PSO was 5 months (1–76). Among 102 women eligible for both surgeries 14 elected them.

No differences in PM were observed between BRCA1 and BRCA2 mutation carriers. The only clinical characteristic associated with PM was being affected by a previous unilateral breast cancer (RR=7.5; p=0.0001). Within the group of healthy women only 2 (4%) opted for a bilateral PM. Being parous (RR=1.6; p=0.015), postmenopausal (RR=1.6; p=0.001), older than 50 years (RR=1.4; p=0.009), and having been tested for BRCA after age 50 (RR=1.5; p=0.014) were all significantly associated with PSO. Multivariate analysis will be presented at ESMO.

**Conclusions:** While PSO is highly accepted among BRCA mutation carriers in our setting, only a minority of female carriers opt for PM. The reasons for the low uptake of PM warrant further study.

## 3533

## POSTER

### The Incidence and Outcome of Febrile Neutropenia in Different Chemotherapy Regimens for Cancer Patients in Belgium

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**Background:** The incidence of febrile neutropenia (FN) varies according the chemotherapy regimen and cancer type. In Belgium reimbursement of granulocyte-colony stimulating factors (G-CSF) in primary prophylaxis of FN is limited to 4 indications. This study aimed to provide real life information on the incidence and impact of FN in chemotherapy-cancer combinations excluded from G-CSF primary prophylaxis reimbursement.

**Material and Methods:** Based on ICD-9 code and drug name all chemotherapy-cancer combinations with at least one patient having an ICD-9 code corresponding to neutropenia (288.0) and/or fever (780.6) and where G-CSF primary prophylaxis was not reimbursed, were retrieved from the IMS Hospital Disease database for the period 2005–2008. This database includes longitudinal (per calendar year) information on diagnoses and drugs prescribed in about 34% of all Belgian hospital beds. Incidence of FN (cases of FN with chemo-cancer combination divided by total number of patients with this chemo-cancer combination),

mortality in patients with and without FN and impact of FN on subsequent chemotherapy treatment decisions were assessed.

**Results:** Among the 25,544 patients at risk studied, 3,191 (12.5%) had at least one FN episode. Table 1 shows the chemo-cancer combinations with the highest incidence of FN and the mortality rates in patients with and without FN (only combinations with more than 100 patients included). Of the FN episodes 50.3% occurred during the first chemotherapy cycle. Of the patients with FN 11.4% died, 24.0% switched to another chemo regimen and 21.7% stopped treatment during the cycle with FN. A subsequent FN occurred in 26.8% of the 1,367 patients continuing the same chemo regimen.

Table 1: Chemo-Cancer combinations with the highest FN-incidence rates

Cancer	Chemo regimen	N	FN incidence, n (%)	Mortality, n (%)	
				FN	No FN
Head and neck	Cisplatin	172	43 (25)	2 (5)	6 (5)
	Cisplatin + 5-FU	115	28 (24)	1 (4)	6 (7)
Stomach	Cisplatin + 5-FU	110	24 (22)	6 (25)	7 (8)*
Oesophagus	Cisplatin + 5-FU	202	36 (18)	7 (19)	14 (8)*
Multiple myeloma	Doxorubicin + vincristin	152	26 (17)	2 (8)	2 (2)
Lung	PE (cisplatin, etoposide)	292	52 (18)	11 (21)	18 (8)*
	CE (carboplatin, etoposide)	659	102 (16)	36 (35)	66 (12)*
	Etoposide	327	48 (15)	11 (23)	24 (9)*
	Cisplatin + docetaxel	132	19 (15)	4 (21)	9 (8)*

5-FU, 5-fluorouracil.

\*p-value <0.05.

**Conclusions:** This study indicates the negative impact of FN on the course of the disease, especially in terms of mortality and treatment disruption, in indications where G-CSF primary prophylaxis was not reimbursed.

## 3534

## POSTER

### Results of the First Round of Breast Cancer and Cervical Cancer Screening Programmes in Latvia

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**Background:** The incidence of cervical cancer stays unchanged in Latvia during the last decade, while breast cancer incidence is increasing as well as the mortality. The main reason is the high number of advanced stage disease at the time of diagnosis. The breast cancer screening programme, using mammography, as well as cervical cancer screening using cytological analysis was initiated to diagnose the cancers earlier to raise treatment results in this field.

**Methods:** Population-based programmes of cervical cancer and mammography screening in Latvia were initiated in January 2009. The programmes offer cytological testing of cervical canal secretions in women aged from 25 to 70 once in 3 years, and a biennial mammography to women aged between 50 and 69. Screening is decentralised, 6 laboratories and 25 radiology units are involved in that screening. Double reading of the obtained results is mandatory according to the national policy.

BiRADS category	No. of examinations	%	C category	No. of examinations	%
R1	13658	30.16	C0	934	1.58
R2	23277	51.40	C1	29820	50.53
R3	7793	17.20	C2	26845	45.48
R4	503	1.11	C3	1190	2.02
R5	54	0.12	C4	219	0.37
			C5	8	0.013
			C6	4	0.007

**Results:** Selection of the target population for the screening was based on population register of Latvia. 433016 women were invited to take part in the cervical cancer screening from Jan 2009 to Dec 2010. 286785 women were invited to have screening MG from Jan 2009 to Dec 2010. 59020 (13.6%) screening cytological testings were performed, 57340 (20%) screening MG had been done. Participation varied from 12.3% to 17.4% in cervical cancer and 17.3% to 22.7% in breast cancer screening programme in different