

Descriptive statistics, t-tests and logistic regression analyses were conducted.

**Results:** The response rate was 47.4%. Of the 130 respondents 43.8% used CAM. Vitamins and minerals were the most common (50.9%) used CAM product. Patients usually started with CAM on their own initiative and the most common reason to use CAM was to stimulate the immune system (56.1%). 66.7% did not report CAM use to the physician, usually because patients thought it was unimportant (48.6%). Most CAM users (89.1%) thought CAM was effective.

There was no significant difference in age ( $p=0.496$ ), educational level ( $p=0.175$ ), relationship status ( $p=0.681$ ), having children ( $p=0.175$ ), or smoking ( $p=0.154$ ) between CAM-users and non-users. More CAM-users (71.9%) drank more than 1 alcohol consumption per week than non-users (46.6%) with an odds ratio of 2.93 ( $p=0.004$ ). The average Body Mass Index of CAM-users (20.6) was lower than of non-users (22.5,  $p=0.009$ ).

No statistical significant difference existed in faith in conventional treatment ( $p=0.547$ ) or QOL ( $p=0.371$ ). The Multidimensional Health Locus of Control (MHLC), for determining the locus of control over a patient's health or illness showed no significant difference between the two groups.

**Conclusions:** CAM use appeared common among recently diagnosed breast cancer patients in the Netherlands. Most CAM-users did not discuss this with their physician. Since clinically significant drug interactions have been described for CAM, physicians and other health care providers should discuss this topic with their patients.

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### Sexual Dysfunction in Married Breast Cancer Patients: a Follow-up Study

I. Harirchi<sup>1</sup>, F. Zamani Bidokht<sup>1</sup>, N. Mamishi<sup>1</sup>, K. Zendeheidi<sup>1</sup>, A. Montazeri<sup>2</sup>. <sup>1</sup>Cancer Institute of Iran – Tehran University of Medical Sciences, Cancer Research Centre, Tehran, Iran; <sup>2</sup>Iranian Institute for Health Sciences Research (ACECR), Mental Health Research Group – Mother and Child Health Research Centre, Tehran, Iran

**Background:** Sexual function affects quality of life in patients with breast cancer especially younger patients. This study aimed to assess sexual function among Iranian breast cancer patients.

**Material and Methods:** This was a follow-up study of sexual function in breast cancer patients attending the Cancer Institute of Iran. Sexual function was assessed using the Female Sexual Function Index (FSFI) at two points in time: baseline (pre-treatment) and after completion of treatment at follow-up visits (post-treatment). Pre- and post-treatment data were compared. In addition logistic regression was performed to find out factors contributing to post-treatment sexual dysfunction.

**Results:** In all 277 breast cancer patients were approached. Of these, 231 patients (83%) were sexually active and data for 216 patients (93.5% of sexually active patients) were available at pre-and post-treatment. Overall pre-and post-treatment sexual dysfunction was found to be 52% and 84%, respectively; indicating a significant deterioration in sexual function among breast cancer patients. Logistic regression analysis indicated that younger age ( $OR=0.94$ ), receiving endocrine therapy ( $OR=3.29$ ) and poor sexual function at pre-treatment ( $OR=12.4$ ) were the most significant contributing factors to post-treatment sexual disorders.

**Conclusions:** Breast cancer patients might show deterioration in sexual function over time. The findings from this study indicated that younger age, receiving endocrine therapy, and poor sexual function at diagnosis were the most significant predicting factors for sexual disorders in breast cancer patients after treatment.

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### The Effect of Chemotherapy on Objective Cognitive Functioning in Breast Cancer Patients

J. de Vries<sup>1</sup>, M.J.J. Pullens<sup>1</sup>, J.A. Roukema<sup>2</sup>. <sup>1</sup>Tilburg University, Medical Psychology and Neuropsychology, Tilburg, The Netherlands; <sup>2</sup>St Elisabeth Hospital, Surgery, Tilburg, The Netherlands

**Background:** Recent studies suggest that chemotherapy may induce cognitive decline in women treated for breast cancer. However, evidence for this chemotherapy-induced cognitive decline is inconclusive. Therefore, the purposes of this multicenter, prospective longitudinal study was to examine the effect of chemotherapy on objective cognitive functioning in breast cancer patients three months after chemotherapy administration.

**Materials and Methods:** Post-operatively and before chemotherapy, breast cancer patients were asked to participate in this study. The control group consisted of women who were diagnosed with a benign breast problem. Before the chemotherapy started and three months after completion of chemotherapy (and at comparable moments for the benign breast problem group), a neuropsychological test battery was administered

covering the following domains: verbal memory, visual memory, information processing speed, executive functioning, verbal fluency, motor speed and reaction speed.

**Results:** At the moment of analysis 52 breast cancer patients (mean age 51, range: 28–69) and 50 patients with a benign breast problem (mean age 47, range 21–71) had completed both neuropsychological assessments. With age and verbal intelligent quotient as covariates we found no interaction effects ( $p \geq 0.145$ ) and no significant effects for time on the neuropsychological domains ( $p \geq 0.270$ ), indicating that objective cognitive functioning remained stable over time. In addition, no significant differences between the breast cancer patients and the patients with a benign breast problem were found on any of the neuropsychological domains ( $p \geq 0.232$ ).

**Conclusion:** Three months after ending chemotherapy no effect was found on objective cognitive functioning in breast cancer patients.

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### Association of Triple-negative Breast Cancer with Extracapsular Extension of Axillary Lymph Node Metastasis

S. Maksimovic<sup>1</sup>, B. Jakovljevic<sup>1</sup>, Z. Gojkovic<sup>1</sup>. <sup>1</sup>Clinic Center Banja Luka, Clinic of Oncology, Banja Luka, Bosnia-Herzegovina

**Background:** Triple-negative breast cancers (TNBC) are defined by a lack of expression of estrogen, progesterone, and ERBB2 receptors. We compare the clinical features and prognosis of association of triple-negative breast cancer with extracapsular extension of axillary lymph node metastasis.

**Materials and Methods:** From January 2000 to December 2009, 591 breast cancer patients operated in General hospital 'Sveti Vracevi' in Bijeljina. We selected 301 (50.9%) patients with breast cancer who had metastases to axillary lymph nodes.

**Results:** Extracapsular extension (ECM) was found in 122 (40.5%). Eighty-three patients (14%) were classified as TNBC. The patients were identified and divided into two groups: 22 patients with triple-negative breast cancer with extracapsular extension of axillary lymph node metastasis (TNBCECM) and 14 patients with triple-negative breast cancer without extracapsular extension of axillary lymph node metastasis (TNBCICM). 49 patients (40.1%) were identified with three or less lymph nodes involved, 30 patients (24.5%) patients four to six, 24 patients (19.6%) seven to nine, and 19 patients (15.5%) ten or more nodes, respectively. Total number of lymph nodes showing ECM were also significantly more in the TNBCECM (48 of 81, 59.25%) vs. (13 of 60, 21.66%) in the TNBCICM group ( $P < 0.001$ ).

**Conclusion:** New strategies in the search for effective treatment options for patients with TNBC have focused on both new chemotherapy regimens and targeted therapies. In patients TNBCECM prognosis was significantly worse compared with those who were TNBCICM. These findings have led to the conclusion that TNBC is associated with a more aggressive subtype of cancer.

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### Lifestyle and Change in Bone Mineral Density in Japanese Postmenopausal Women with Hormone Receptor-positive Breast Cancer Before and After 1 Year of Aromatase Inhibitor Treatment

R. Nishimura<sup>1</sup>, M. Yamaguchi<sup>2</sup>, R. Watanabe<sup>3</sup>, U. Toh<sup>4</sup>, K. Koga<sup>5</sup>, K. Shirahane<sup>6</sup>, Y. Yoshinaga<sup>7</sup>, H. Sasaki<sup>8</sup>, K. Tamura<sup>9</sup>, S. Mitsuyama<sup>5</sup>. <sup>1</sup>Kumamoto City Hospital, Breast & Endocrine Surgery, Kumamoto City, Japan; <sup>2</sup>Social Insurance Kurume Daiichi Hospital, Surgery, Kurume City, Japan; <sup>3</sup>Hakuikai Hospital, Breast Surgery, Fukuoka City, Japan; <sup>4</sup>Kurume University School of Medicine, Surgery, Kurume City, Japan; <sup>5</sup>Kitakyushu Municipal Medical Center, Surgery, Kitakyushu City, Japan; <sup>6</sup>Graduate School of Medical Sciences Kyushu University, Surgery and Oncology, Fukuoka City, Japan; <sup>7</sup>Fukuoka University Hospital, Thoracic Endocrine and Pediatric Surgery, Fukuoka City, Japan; <sup>8</sup>Kanmon Medical Center, Clinical Oncology, Shimonoeki City, Japan; <sup>9</sup>Fukuoka University Hospital, Medical Oncology Hematology and Infectious Disease, Fukuoka City, Japan

**Background:** Unlike tamoxifen, aromatase inhibitors (AIs) reduce bone mass and significantly increase the risk of fractures. [1,2] Therefore, clinicians and patients need to be aware of this risk during long-term treatment with AIs. Genetic factors and lifestyle habits such as diet and exercise are involved in the maintenance of bone mineral density (BMD). However, since lifestyle habits differ between Western and Japanese individuals, it is important to confirm whether the same risk can be applied to Japanese patients. Therefore, we assessed the lifestyle and bone status of Japanese postmenopausal women with hormone receptor-positive early-stage breast cancer before and after 1 year of initial treatment with AI treatment.