£33,381 in 95% of the PSA replicates. The cost effectiveness was improved in patients 70 years and older at entry and in patients with low BMD.

Conclusions: This analysis suggests that treatment with ZOL is cost-effective for the prevention of bone-loss and fractures in PMW with early BCa receiving AI therapy in the UK.

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Nationwide Korean breast cancer data of 2006 using breast cancer registration program

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Background: Since 1996, Korean Breast Cancer Society has analyzed and reported the nationwide breast cancer data biennially. The purpose of the present study was to evaluate the chronological changes and characteristics of Korean breast cancer. From 2001, on-line Korean Breast Cancer Registration Program was started and we can now obtain and analyze the data more easily.

Materials and Methods: Data were collected from 39 medical schools (69 hospitals), 23 general hospitals and 5 private clinics. Essential data (patient number, age, sex) were collected via questionnaire and other detailed data were collected through the on-line Korean Breast Cancer Registration Program.

Results: In 2006, 11,275 cases of breast cancer were newly diagnosed. The crude incidence rate of breast cancer of 2006 was 46.8 among 100,000 women and median age was 48.0 years. The age distribution of breast cancer peaked in the fifth decade (40.0%); followed by the sixth (25.7%), fourth (14.3%) and seventh (13.0%) decades. The proportion of early breast cancer (stage 0, I) was 47.5% and breast conserving surgery was performed in 48.8% of the patients. Compared with the results of previous survay, characteristics of Korean breast cancer in 2006 were (1) an increase in the number of patients and the incidence rate, (2) high proportion of young age premenopausal patients, (3) increase in the proportion of breast conserving surgery, (4) increase in the rate of early cancer (stage 0, I), (5) increase in the rate of patients whose breast cancer was detected on screening, (6) increase in patients with some risk factors.

Conclusions: Present study suggest the incidence of Korean breast cancer will continue to rise. Several characteristics of Korean breast cancer patients seem to follow the patterns of western countries, but differences are also present. We, all the members of Korean Breast Cancer Society, believe that it was very important and meaningful to understand the characteristics of Korean breast cancer through continuous nationwide data collection and analysis as the present study in the future.

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Physical activity and the risk of breast cancer in BRCA1/2 families in the Netherlands

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It has been consistently shown that physical activity reduces the risk of breast cancer in the general population by approximately 20−40%. However, it remains unclear whether and how physical activity affects breast cancer risk in BRCA1/2 breast cancer families. Since physical activity is a modifiable risk factor, it is important to obtain insight in its possible influence on the risk of breast cancer in this high-risk population.

In this retrospective nationwide cohort study, a self-administered questionnaire on known and suspected breast cancer risk factors was completed in by 3715 eligible female family members in 485 BRCA1/2 families between 1998 and 2007. In order to reduce potential survival bias, information on deceased persons was collected through a close relative. 918 women were typed as BRCA1/2 mutation carrier and 142 were identified as obligate carrier. Information on breast and ovarian cancer and on preventive surgical measures was verified with the PALGA database (Pathological Anatomy National Automated Archive) until August 2007.

Information on physical activity will be derived from questions on walking, cycling, household activities, longest held occupation and sport activity (before and after age 20). Duration (average amount of hours spent weekly) and intensity (ratio of work metabolic rate to resting metabolic rate (METs)) will be considered separately and combined. We will also analyse a total physical activity score in which the different categories of physical activity will be combined. The multivariate hazard ratio as estimate of relative risk and 95% confidence intervals will be obtained using the Cox Proportional Hazards Model stratified for gene and birth cohort with subjects' censoring-age as time scale. Possible effect modification by family history of breast cancer and BMI will be investigated. Results will be presented.

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Triple negative breast cancers – clinicopathological differences in an Asian population

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Background: Triple negative breast cancers (TNBC) account for 15% of breast cancers and more frequently affect premenopausal African and Afro-American women. There is a paucity of data from Asian countries. We aim to review our data to compare clinicopathological characteristics in our local population.

Methods: 326 consecutive patients treated for breast cancer from May 2006 to December 2007 were analyzed. Data on clinical and histopatho-logic characteristics were retrieved from a prospectively collected database. TNBC patients were defined by negativity of estrogen, progesterone and HER2neu receptors. Chi square analysis was used to evaluate independent prognostic factors.

Results: In the study cohort, the median age was 56 years (range 27−90). 284 (88%) were invasive ductal carcinoma, 18 (6%) were invasive lobular carcinoma, 14 (4%) were mucinous and 8 (3%) were others (cribiform, tubular etc). 236 (73%) were estrogen receptor positive, 144 (45%) were progesterone receptor positive and 52 (16%) were Her2neu positive.

The incidence of TNBC is 13%. The majority were between the age groups 51 to 60 years (35%) >60 years old (37%). 69.8% (n = 30) were Chinese and 30% (n = 13) of the patients were premenopausal. Tumour size was $\leqslant$1 cm in 3% (n = 1), 1.1−2 cm in 33% (n = 13), 2–5 cm in 49% (n = 19) and >5 cm in 15% (n = 6). Lymphovascular invasion was seen in 10 (29%) patients. 30% (n = 13) presented with AJCC stage 1 disease, 35% (n = 15) with stage 2 disease; 26% (n = 11) with stage 3 disease and 9% (N = 4) with stage 4 disease. The majority were grade 3 tumors (79%).

The non-TNBC group comprised 283 patients (86%). The majority were between 41−50 years (29%) and 51–60 years (31%). 77% (n = 217) were Chinese and 38% (n = 106) were pre-menopausal. 5% (n = 13) had tumors $\leqslant$1 cm, 34% (n = 83) were 1.1−2 cm, 46% (n = 114) were 2−5 cm and 15% (n = 38) were >5 cm. Lymphovascular invasion was seen in 33% (n = 75). 31% (n = 88) presented with stage 1 disease; 35% (n = 107) were stage 2, 19% (n = 55) were stage 3 and 12% (n = 33) were stage 4. The majority were grade 1 or 2 tumors (69%). Lymph nodes were positive in 128 (47%).

Prognostic variables evaluated suggest that TNBC occur more commonly in postmenopausal women ($p = 0.05$) and are high grade ($p < 0.005$). There were no differences for age, ethnicity, tumour size, lymphovascular invasion, staging and nodal involvement.

Conclusion: The incidence of TNBC in our population is similar to Western literature. TNBC are more likely to be high grade tumors. Unlike other studies, TNBC seem commoner in post-menopausal women in our country.

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Breast cancer treatment and outcome in women $\geqslant$50 years old with high familial risk

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Background: Data on impact of family history on presentation, management and outcome of breast cancer are conflicting. In this population based study we compared breast cancer characteristics, treatments and survival among patients 50 years or older with and without a positive family history of breast cancer.

Methods: At the population-based Geneva familial breast cancer registry, we identified all women $\geqslant$50 years diagnosed with primary invasive breast cancer between 1990–2004. Family history was considered as high if $\geqslant$1 first-degree relative had early onset breast cancer, or if 2 or more second-degree relatives had breast/ovarian cancer. We excluded from the analysis patients with moderate or unknown family history.We compared tumor characteristics and treatment between patients with high vs. no family history by means of logistic regression analysis. We used Kaplan–Meier analysis to calculate breast cancer specific survival rates. With Cox proportional hazard analysis we identified factors significantly associated with breast cancer mortality risk adjusting for confounders.