Results: Patients older than 70 year and patients with favourable tumour characteristics are served best with a minimal follow-up of one visit during one year. Patients younger than 40 years and patients with unfavourable tumour characteristics (>3 positive lymph nodes, tumour size >2.0 cm) can benefit from a more intensive follow-up of twice a year for five years.

Conclusions: There is uncertainty about how to organize cost-effective routine follow-up. This study underlines the possibility and potential for individualized follow-up in breast cancer patients. With these results we can provide schematic guidelines for specialists to select an appropriate follow-up scheme for various patient groups.

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Malignant giant breast masses in adolescent females: spectrum in a specialist unit of a developing country university hospital

A. Mishra[1], D. Singh[1], R. Kant[1]. [1]*C.S.M. Medical University, Department of Surgery, Lucknow, India*

Background: Outcome of management of giant breast masses in adolescent females.

Material and Method: We retrospectively reviewed the medical records of 49 patients with giant masses of 451 patients with breast symptoms less than 30 years who had undergone surgery seen during 2006 to 2008.

Results: The mean age was 19.5 years. The mean tumor size was 73 mm (45–250). A lump in the breast was the commonest presentation. Eight patients were referred with clinical diagnosis of cancer. Three had diffuse nodularity and multiple sinuses with concomitant axillary lymph nodes. 12 patients had recurrent cystosarcoma phylloides (CP). 45 had unilateral single breast mass while 4 had bilateral mass. After investigations there were giant fibroadenoma (9), b/l multiple fibroadenoma (2), tubercular mastitis (12) with 6 clinically mimicking cancer, CP (17), cancer (6), lipoma (1), hypertrophy (2). Diagnosis of tubercular mastitis was obtained via FNAC (8 cases), core biopsy (4 cases) and none required excision. All malignant CP received adjuvant radiation. During a mean follow up of 9 months no recurrence was noted. Breast Cancer were treated according to department protocol.

Conclusion: Majority of breast mass in adolescent females are benign. We recommend simple mastectomy for recurrent malignant CP and wide excision for benign CP. Breast tuberculosis is not uncommon often mistaken for carcinoma, especially if well-defined clinical features are absent. A high index of suspicion is required because the disease can usually be treated conservatively with current antituberculous modalities.

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Patterns of care and safety profiles of adjuvant docetaxel-based chemotherapy regimens in a large breast cancer registry study in Asia Pacific

T.K. Yau[1], A. Sayeed[2], Z.Z. Shen[3], S.B. Kim[4], M. Ali Shah[5], A.H. Villalon[6], M.F. Hou[7], T.V. Thuan[8], Z.M. Shao[3], J.H. Kim[9]. [1]*Pamela Youde Nethersole Eastern Hospital, Clinical Oncology, Hong Kong, China;* [2]*Holy Family Red Crescent Medical College Hospital, Department of Surgery, Dhaka, Bangladesh;* [3]*Cancer Hospital Fudan University, Department of Breast Surgery, Shanghai, China;* [4]*Asan Medical Centre, Department of Internal Medicine, Seoul, Korea;* [5]*Shaukat Khanum Memorial Hospital and Research Centre, Lahore, Pakistan;* [6]*Manila Doctors Hospital, Department of Medicine, Manila, Philippines;* [7]*Kaohsiung Medical University Chung-Ho Memorial Hospital, Department of Surgery, Kaohsiung, Korea;* [8]*National Cancer Hospital, Department of Internal Medicine, Hanoi, Vietnam;* [9]*Seoul National University Bundang Hospital, Seoul, Korea*

Background: This observational, registry-based study is designed to assess patient profiles, patterns of care, and the tolerability of docetaxel-based adjuvant chemotherapy for early breast cancer patients in Asia Pacific.

Materials and Methods: Patients with newly diagnosed operable breast cancer were enrolled in Taiwan, Korea, China, Hong Kong, Vietnam, Philippines, Singapore, Pakistan, Bangladesh, and India. No experimental intervention was imposed except that patients had to have a high risk of recurrence and to receive docetaxel-based chemotherapy as adjuvant treatment. Assessments included demographics, disease stage and biologic characteristics, surgery and chemotherapy plans, and adverse events (AEs). Patients are being followed up to determine treatment efficacy. Data presented are from the second interim analysis performed 3 years after the start of the study.

Results: The median age of participants (N = 1,537) was 47 years (range: 23−83); 57.8% had AJCC Stage I/IIA/IIB disease. Immunohistochemistry showed 62.0% were ER positive and 43.1% were HER2 positive. Total mastectomy was the most common surgical intervention (72.6% of patients). Sequential docetaxel therapy (mean 7.4 cycles) was used in 56.5% of patients, with AC → T and FEC → T being the most commonly used regimens (in 30.5% and 17.7% of patients, respectively) [docetaxel (T); doxorubicin (A); cyclophosphamide (C); 5-fluorouracil (F); epirubicin (E)]. Combination therapy was used in 38.9% of patients overall (mean 5.6 cycles), with TEC and TAC the most common regimens (12.2% and 10.2% of patients, respectively). Growth factor support was used in 5.1% of sequential therapy patients (mean 4.3 cycles) and 16.9% of combination therapy patients (mean 3.4 cycles). The most common haematological AEs were neutropenia and anaemia (in 55.7% and 48.8% of sequential therapy patients and 73.4% and 39.2% of combination therapy patients, respectively; 40.6% overall had Grade 3/4 neutropenia). Febrile neutropenia was reported by 11.8% on sequential therapy and 23.3% on combination therapy. The most common non-haematological AEs with sequential treatment were nausea (83.6%), alopecia (73.8%), myalgia (63.0%), stomatitis (60.5%) and vomiting (60.0%).

Conclusions: Sequential regimens are the most commonly used docetaxel-based adjuvant chemotherapy for Asian early breast cancer patients having a high risk of recurrence. Data from this study will enable comparisons of patient profiles, disease characteristics, and efficacy and tolerability of different docetaxel-containing regimens to be made between Asian and western women.

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Changes of breast cancer incidence and trend among Japanese young women for the period 1972–2007

Y. Koibuchi[1], J. Horiguchi[1], M. Kikuchi[1], R. Nagaoka[1], N. Rokutanda[1], A. Sato[1], H. Odawara[1], H. Tokiniwa[1], I. Takeyoshi[1], Y. Iino[2]. [1]*Gunma University Faculty of Medicine, Department of thoracic and visceral organ surgery, Maebashi Gunma, Japan;* [2]*Gunma University Faculty of Medicine, Department of emergency, Maebashi Gunma, Japan*

Background: Many young breast cancer patients hope childbirth after treatments, however childbirth is harmfully influenced by chemo-endocrine therapies of breast cancer. The age of marriage and first childbirth has been older in Japan. The aim of this study was to investigate the changes of breast cancer incidence and trend among 35 and younger women in Japan and also investigate the rate of undelivered and unmarried women.

Materials and Methods: We analyzed trends in breast cancer incidence at Gunma University hospital, Gunma Prefecture, Japan, for the period 1973–2007. To distinguish the trends of breast cancer patients, we picked the central 5 years of the decades.

Results: Total number of breast cancer patients was 258 between 1973−77, 413 between 1983−87, 390 between 1993−97, and 621 between 2003–2007, respectively. The number and rate of age 35 years and under breast cancer patients was 25 (9.7%) between 1973−77, 33 (8.0%) between 1983−87, 30 (7.7%) 1993−97, and 36 (5.8%) 2003–2007, respectively. Among those young patients, the rate of unmarried women was 12%, 33%, 37% and 33%; the rate of undelivered women was 12%, 36%, 50% and 47%, respectively. The rate of patients who hope childbirth was 72% for the period 2003–2007. The rate of Tis or Stage? breast cancer patients was 16%, 30%, 50% and 44%. The rate of breast conserving therapy underwent patients was 43% for the period 1993–1997 and 66% for the period 2003–2007.

Conclusions: The incidence in age 35 years and under young breast cancer patients was decreased over the 40-year period. The rate of unmarried and undelivered patients was increased and most of them hope childbirth.

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Is 'Two-week rule for all breast referrals' in UK justified?

M.A. Parvaiz[1], S. Jaleel[1], S. Eltayef[1], V. Dewan[1], N. Abbott[1], C. Jones[1], B. Isgar[1]. [1]*New Cross Hospital, General/Breast Surgery, Wolverhampton, United Kingdom*

Background: In December 2009 a UK government target will demand all new breast referrals are seen within 2 weeks. Currently fast-track patients are seen within two weeks and non-urgent five weeks. We aimed to assess the breast clinic referral pattern according to pathology in fast-track, non-urgent and tertiary groups.

Materials and Methods: A prospective data collection of all patients referred to a one-stop breast clinic under a single consultant from 15th September 2008 to present.

Results: 1792 patients were seen, 117 (6.5%) breast cancers were diagnosed.

91.5% of all cancer diagnoses (107 out of 117) were seen within two weeks as fast-track or tertiary referrals. This was significantly more ($p < 0.05$) than the number of cancers diagnosed in non-urgent group (10 patients). Cancer ratio in fast-track & tertiary groups together was 1 in 7.6 whereas in non-urgent group it was 1 in 97.7.

Conclusions: General practitioners are currently appropriately referring to urgent and non-urgent clinic slots. The new target will offer no advantage to cancer patients but will increase pressure on existing services. It can potentially compromise diagnostic accuracy unless the service is fully and appropriately resourced.

	Fast-track	Non-urgent	Tertiary
Total number	774	977	41
Age range (median)	14–95 (45)	13–86 (39)	18–90 (54)
Cancer (percent of group total)	99 (12.8%)	10 (1%)	8 (19.5%)
Benign pathologies			
Total	264	264	17
Fibroadenoma	47	51	1
Cysts	107	87	1
Others	110	126	15
Mastalgia only	377	647	15
Gynecomastia	34	56	1

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The early integration of palliative care for breast cancer patients in the SOP breast cancer at the Cologne Bonn CIO (Center of interdisciplinary oncology)

R. Wuerstlein[1], J. Gaertner[2], M. Warm[1], R. Voltz[2], P. Mallmann[3], N. Harbeck[1]. [1]*University of Cologne, Breast Center, Cologne, Germany;* [2]*University of Cologne, Palliative Care, Cologne, Germany;* [3]*University of Cologne, Gynecology and Obstetrics, Cologne, Germany*

Background: Overall survival can be very long in metastatic breast cancer. This makes a difference to other metastatic diseases. Nevertheless, at the end a large number of patients needs palliative care for various reasons such as control of symptoms, homecare, psychosocial interactions and continuous contact persons. Therefor, we decided to change the moment of implementation of palliative care for our metastatic breast cancer patients to improve interdisciplinary treatment, life quality and integration of patient and family in the following therapeutic decisions.

Materials and Methods: By re-writing the SOP breast cancer in the interdisciplinary CCC of the university hospitals Bonn and Cologne (CIO Köln-Bonn) we could integrate the early implementation of palliative care by our specialised outpatient-care team correspondiong to WHO criteria. We describe the process of developping the SOP focusing on palliative care and detecting the right timing of palliative care support. At the same time, we present the interdisciplinary concepts available at the CIO.The new strategy was developped in cooperation of the breast cancer as well as the palliative care givers in interdisciplinary interaction.

Results: First indication of chemotherapeutic approach in the metastatic setting was defined as the best moment of integration of the palliative care team: not too ealy for the patient at a moment of good life quality as long, as she does not need palliative chemotherapy, but early enough to link breast cancer team, palliative care team and the patient with her familiy and surrounding under good conditions.

Conclusions: In further studies, we will now focus on the process itfself of early implementation as well at its meaning for the participating care givers and patients satisfaction with the model.

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Uptake of trastuzumab (T) in selected European countries during the first 9 years after market introduction

U. Wilking[1], J. Bergh[1], B. Jonsson[2], F. Kasteng[3], N. Wilking[1]. [1]*Karolinska Institutet, Oncology–Pathology, Stockholm, Sweden;* [2]*Stockholm School of Economics, Center for Health Economics, Stockholm, Sweden;* [3]*I3 Innovus, Stockholm, Sweden*

Background: T was approved for use in metastatic breast cancer (MBC) in Q3, year 2000 and was approved for treatment in early breast cancer (EBC) in 2006. The use of T is of interest to study, as the drug have a defined patient population (HER2 positive) and was the first available specific treatment option for this patient group. The pivotal and randomized studies demonstrated survival improvements, first in MBC and later in EBC, while cost-effectiveness differ between indications and countries. This report focus on similarities and differences in the utilization during the first 9 years of use of T in 10 European countries, representing countries in Northern, Western and Central/Eastern Europe.

Methods: Based on data from IMS Health, uptake and use of T was studied in Denmark, Finland, Hungary, Italy, Norway, Poland, Spain, Sweden and the United Kingdom. The calculations are based on the assumption that 25% of MBC patients are HER2 positive. (The rate of positivity in EBC has been reported to be 15–20%). We calculate use in mg/case, assuming that the number of cases is equal to 25% of mortality rates in year 2002 (mortality has been relatively stable during the 10 years of this study, Globocan data). As patients with MBC have an estimated survival of >2 years, the calculations include also year 1999. We calculated the use in a 0–5 year cohort (MBC pts 1999–2004) and a 5–10 year cohort (MBC and EBC pts 2004–2009).

Results: See the table.

Country	Use/case, 2000–2009	% use related to Spain	1999–2004 related to 2005–2009
Denmark	5947	69%	8.4%
Finland	5861	68%	14.7%
France	8226	95%	9.7%
Hungary	2058	24%	1.4%
Italy	6439	74%	11.5%
Norway	5554	69%	6.1%
Poland	1630	19%	12.2%
Spain	8672	100%	15.7%
Sweden	6763	78%	11.5%
UK	4930	57%	8.0%

Discussion and Conclusions: There are considerable variations in the use of trastuzumab in the 10 European countries of this study. The utilization in France and Spain is 4–5 times that of the use in Hungary and Poland for the whole period, and there are also major differences in the early use (2000–2004).

The differences reflect different affordability, different assessments of value and cost-effectiveness (Norway; MBC) and differences in treatment schedules (Finland; EBC). Most of the differences are unexplained and reflect different interpretations of data and priorities made in clinical practice and resource allocation in health care systems.

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Estrogens exposure as risk factor of breast cancer in premenopausal women all residing in the same metropolitan area. A case–control study in a cohort of 486 women

F. Lumachi[1], S.M.M. Basso[2], B. Marzano[2], M. Bonamini[2], B.U. Waclaw[2], G.B. Chiara[2]. [1]*University of Padova, Surg & Gastroenterol Sciences, 35128 Padova, Italy;* [2]*S. Maria degli Angeli Hospital, U.O. Chirurgia 1, 33170 Pordenone, Italy*

Background: The aim of this study was to evaluate the weight of different risk factors (RF) in a cohort of premenopausal patients withbreast cancer (BC), all residing in the same metropolitan area.

Patients and Methods: Data regarding a series of 233 patients (cases), and 253 randomly age-matched healthy women (controls) were reviewed. Odds ratios (OR) estimated and the associated 95% confidence (CI) intervals were calculated. The chi-squared test and Student's t-test were used to compare categorical variables and means of grouped data, respectively.

Results: The results are reported in the Table. Age at menarche (12.1 ± 2.3 vs. 12.8 ± 1.8 years), age at first pregnancy (26.0 ± 4.6 vs. 23.6 ± 3.8 years), and months of breast feeding (9.3 ± 7.2 vs. 12.1 ± 7.1) significantly ($p < 0.001$) differ between cases and controls, while parity (1.4 ± 1.5 vs. 1.4 ± 0.9, $p = 0.94$), and months of oral contraceptives use (34.4 ± 24.2 vs. 30.8 ± 27.2, $p = 0.21$) did not.

Conclusions: In this cohort of premenopausal patients, factors related to estrogens exposure (early age of menarche, late first pregnancy, and duration of oral contraceptive use) did not represent strong RF related to BC.

Characteristics	Cases (%)	Controls (%)	OR	95% CI	P-value
History of BC in relatives	5.6	2.8	2.08	0.81–5.3	0.12
Menarche <12 years	24.0	17.9	1.46	0.94–2.27	0.09
No pregnancies	23.2	18.6	1.32	0.85–2.05	0.21
First pregnancy >30 year	11.7	4.4	2.91	1.30–6.53	<0.01
No breastfeeding	39.7	40.8	0.95	0.63–1.44	0.82
No bilateral ooforectomy	98.7	98.4	1.23	0.27–5.56	0.79
BMI > 24 kg/m^2	22.7	18.2	1.32	0.85–2.07	0.21
Alcohol abuse	9.4	9.9	0.95	0.52–1.74	0.87
Smoking past	6.4	8.7	0.72	0.37–1.43	0.35
Smoking present	18.9	19.0	0.99	0.63–1.57	0.98
Oral contraceptives use	39.0	31.6	1.39	0.95–2.01	0.08