traditional prognostic factors, such as histological grade, steroid hormone receptor status, and the cell proliferation rate were more strongly associated with outcome than the pN0i status.
Conclusions: The findings suggest that presence of isolated tumor cells in the sentinel nodes is an adverse prognostic factor in early breast cancer, but its prognostic significance in association with the standard factors may be limited.

5010 ORAL

Survival and safety post study treatment completion: an updated analysis of the Intergroup Exemestane Study (IES) – submitted on behalf of the IES Investigators

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Background: The IES trial demonstrated a benefit in disease outcome of switching adjuvant therapy to exemestane (E) after 2−3 years tamoxifen (T) in postmenopausal patients with early breast cancer (Coombes RC et al, Lancet 2007). At that time the trial steering committee agreed to conduct an updated survival and safety analysis when at least 90% of surviving patients had a minimum of 6 years follow-up available. The emphasis of this presentation will focus on disease free survival (DFS) outcome after study treatment completion and a more mature analysis of overall survival.
Materials and Methods: 4724 postmenopausal women with histologically confirmed, completely resected, ER positive/unknown unilateral breast cancer, disease free after 2−3 years T, were randomised to continue T or switch to E to complete a total of 5 years adjuvant endocrine therapy. This study is an investigator-led study, sponsored by Pfizer Ltd and is registered as an International Standard Randomised Controlled Trial, number ISRCTN11883920.
Results: Previous results based on 55.7 months follow-up reported an un-adjusted hazard ratio (HR) for DFS of 0.75 (95%CI: 0.65, 0.87); p = 0.0001 in favour of E in the ER+/unknown group (n = 4602, excluding 122 patients with ER-disease). Similarly, with E = 210 versus T = 251 deaths, a modest improvement in overall survival was demonstrated (HR = 0.83, 95%CI (0.69, 1.00); p = 0.05). We expect to reach the minimum data cut-off requirement in May 2009 after which the database will be frozen for analysis. An expected median follow-up of 88 months and just over 770 deaths will allow a detailed analysis of DFS partitioned at time of treatment completion to further characterise post treatment effects and allow a more robust estimate of the effect on overall survival. A detailed safety analysis will further clarify the post study treatment safety profile of E.
Conclusions: Additional follow-up information on patients in IES will quantify the extent of any carryover effect of exemestane and provide stronger evidence of any continuing overall survival benefit. The safety analysis will determine any longer term effects of exemestane when used in this setting.

5011 ORAL

ZORO: Prospective randomized multicenter-study to prevent chemotherapy induced ovarian failure with the GnRH-Agonist Goserelin in young hormone insensitive breast cancer patients receiving anthracycline containing (neo-) adjuvant chemotherapy (GBG 37)

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Background: Premature ovarian failure due to chemotherapy (ChT) leads to premature menopause and infertility. To prevent related health problems and to maintain fertility after ChT in patients (pts) with hormone insensitive breast cancer, ovarian function might be protected by using a GnRH-Agonist.
Methods: Pts ⩾18 and >46 years, with a hormone receptor neg primary breast cancer, regular and spontaneous menstruation with premenopausal values for FSH and no evidence of distant metastasis were randomised to receive an anthracycline containing ChT with (G+) or without 3.6 mg goserelin (G−). Goserelin was applied at least 2 weeks before ChT start and every 4 weeks thereafter until the end of the last ChT cycle (EOC). The primary endpoint was normal ovarian function after ChT defined as 2 consecutive menstrual periods within 21−35 days within 5−8 months after last application of goserelin. Secondary objectives are treatment compliance, toxicity, quality of life, menopausal symptoms score, ovarian function at 0, 6, 12, 18 and 24 months by menstruation and endocrine function (estradiol, progesterone, FSH, LH, SHBG), duration until recovery of regular menstrual period, pregnancy rate. A clinically relevant difference between the treatment arms is to be detected at $\alpha = 0.05$ (two-sided) with 80% power. The rate of intact ovarian function will be increased to 80% for patients receiving goserelin. To show an absolute increase of intact ovarian function at 6 months by 30% from 50% without goserelin to 80% with goserelin protection, a total of 62 pts is required.
Results: Between March 2005 and August 2007, 63 pts in 16 sites were enrolled. 60 pts are evaluable, 3 pts withdrew their informed consent. All pts had a regular menstruation and premenopausal FSH. The median age was 35 years in the G+ group and 38.5 years in the G− group. 29 pts received a taxane free ChT (15 in G+, 14 in G−). One woman in each group became pregnant. One pt died within 6 months after EOC due to progression. 6 women started with regular menstruation within 5−8 months after the last application of chemotherapy, 1 in G+ and 5 in G-. 9 serious adverse events occurred, which were mainly chemotherapy related (3 febrile neutropenias, 2 neutropenias, 2 nauseas, 1 infection of port-catheter and 1 psychogenic hyperventilation).
Conclusions: These data in pts with primary breast cancer who are treated by (neo)adjuvant ChT do not support the use of goserelin to protect ChT induced ovarian failure.

5012 ORAL

Persistent pain following breast cancer surgery: a nationwide study of predictors and consequences

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Context: Persistent pain and sensory disturbances following treatment for breast cancer remain a significant clinical problem. The pathogenic mechanisms are complex and may be related to patient characteristics, surgical technique and adjuvant therapy.
Objective: To examine risk factors and consequences of persistent pain after treatment for breast cancer in Denmark.
Design, Setting, and Patients: Nationwide cross-sectional questionnaire study of women operated on for primary breast cancer in Denmark between 2005 and 2006 with well-defined principles for surgery and adjuvant therapy.
Main Outcome Measures: Prevalence, location, and severity of persistent pain and sensory disturbances in 12 well-defined treatment groups with an average follow-up of 26 months. Odds ratio (OR) of reported pain and sensory disturbances in relation to surgical technique, chemo- and radiotherapy.
Results: 3253 women returned the questionnaire (response rate 87%). Overall, 1543 patients (47%) reported pain, of whom 13% reported severe pain, 39% moderate pain and 48% light pain. Pain was located in the breast area (86%), axilla (63%), arm (57%), or on the side of thorax (56%). Factors associated with increased risk of experiencing pain were young age (OR = 3.62; CI: 2.25−5.82, p < 0.0001) and adjuvant radiotherapy (p < 0.05), but not chemotherapy (p = 0.95). Axillary lymph node dissection increased risk of pain (OR = 1.75; CI: 1.41−2.17, p < 0.0001) compared with sentinel lymph node dissection. Mastectomy increased the risk of moderate to severe pain (OR = 1.37; CI 1.00−1.87; p < 0.05) compared to breast-conserving surgery. Pain complaints from other parts of the body were associated with increased risk of pain in the surgical area (p < 0.0001). 10% of pain patients had contacted a physician with the last 3 months for pain complaints in the surgical area. Risk of sensory disturbances was associated with young age (OR = 5.14; CI: 3.13−8.48, p < 0.001) and axillary lymph node dissection (OR = 4.97; CI: 3.92−6.29, p < 0.0001)
Conclusions: Persistent pain in the surgical area after breast cancer treatment remains a significant clinical problem in about 25−60% of patients. Although breast-conserving surgery and sentinel node dissection have reduced the number of complaints, future strategies for further improvement should include nerve-sparing axillary dissection and attention to patients with other chronic pain complaints.