count was 16.23 (SD+ 7.156). Age, pathologic classification and use of taxanes did not influence nodal count. A non-significantly higher number of insufficient ALND were observed in complete tumoral responses (37.5% vs 21%, p = 0.203). Miller and Payne grades C and D in the lymph nodes were associated with an insufficient nodal count (34.4% in Miller and Payne C−D vs 15.1% in A−B, p = 0.005).

Conclusion: as reported by other authors, in our institution, nodal counts are more frequently insufficient in ALND following neoadjuvant chemotherapy than in ALND performed in patients, not receiving chemotherapy. A non-significant trend to a lower nodal count was seen in patients with pathologic complete response in the tumour. A significant lower nodal count was seen in patients with chemotherapy changes in the pathology of lymph nodes (C and D Miller and Payne grades). This suggests that chemotherapy on lymph nodes make more difficult for surgeons to perform ALND and/or for pathologists to identify lymph nodes.

Friday, 18 April 2008 12:30–14:30

POSTER SESSION

Targeted therapies/Advanced disease

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FDG-PET-CT in detecting locoregional disease and distant metastasis in high risk breast cancer patients

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Background and Aim: Conventional staging in breast cancer, consisting of chest-X-ray, ultrasound of the liver and bone scintigraphy, is often considered not to be sufficiently sensitive nor specific, especially with respect to detection of metastases in the internal mammary lymph nodes (IMN). The aim of this study is to evaluate the value of FDG-PET-CT in detecting locoregional disease and distant metastasis in breast cancer patients, in whom conventional screening is indicated according to the Dutch guidelines.

Material and Methods: Between June 2005 and Nov 2007 FDG-PET-CT scanning was added to conventional staging in 28 patients, prior to therapy. In nine patients (group 1) with high risk early stage primary breast cancer (grade III, tumour diameter >3 cm, clinically node positive, age <40 yrs), 4 patients with locally advanced breast cancer (group 2) and 14 patients with locoregional recurrence (group 3) FDG-PET-CT scans were made as a staging procedure. FDG-PET-CT data were analyzed by an experienced radiologist (RB) and nuclear medicine physician (MvK).

Results: A change in T or N stage was made in 10 patients (36%, 95% CI 16−56). The IMN contained a PET positive lesion in 4 patients (14%, 95% CI 0−29) (1 in group 1 and 3 in group 3). Two lesions were histologally proven, 1 was FNA negative and in 1 patient histology was not obtained because of otherwise metastatic disease. Three patients were treated with radiotherapy to the IMN. Distant metastatic disease was found in 5 patients (18%, 95% CI 2−34). One patient had multiple bony lesions; four patients had mediastinal lymph nodes (2 histologically positive, 2 not biopsied). The detection of distant metastases led to minimalisation of locoregional treatment. M1 status was converted to M0 in 4 patients (14%, 95% CI 0−29).

Conclusions: FDG-PET-CT identified metastases to the IMN in 14% of the patients, which had not been identified by conventional staging. Overall stage migration occurred in 36% of the patients, which enabled a better tailoring of the treatment.

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Disease progression as a predictor of overall survival in metastatic breast cancer: a meta-analysis

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Background: The relationship between disease progression endpoints and overall survival (OS) has been demonstrated in colorectal, colon, and non-small cell lung cancers. Patient access to novel and efficacious therapies for metastatic breast cancer (MBC) could be expedited if disease progression were documented as a valid surrogate outcome for OS in pivotal clinical trials. We assessed the association between time to tumor progression (TTP) and progression-free survival (PFS) and OS in randomized controlled trials (RCTs) for MBC.

Methods: A literature search retrieved all RCTs since 1994 in patients with MBC (first-line and refractory) in which both progression endpoints and OS were reported. Summary data on trial and patient characteristics were abstracted. Analyses across studies were performed using the hazard rate ratio where reported or the ratio of median months to event as an approximation of study effect sizes. Logarithm of the effect was regressed without an intercept and weighted by sample size for each study.

Results: A wide range of treatment types was represented in 67 studies covering 17,081 MBC patients. The exponentiated regression of study effect on survival by study effect on progression yielded the equation: $Effect_{Survival} = (Effect_{Progression})^{0.38}$ R^2(adjusted) = 0.34.

Since the confidence interval for the slope parameter does not include zero (95% CI: 0.23, 0.49), we infer that treatment effects on progression will yield treatment effects on survival, though the difference between groups is not expected to be as large. Four of the studies identified all patients as HER2+; in this subset, the association between progression and survival benefit was stronger (slope = 0.36; CI: 0.19, 0.53; R^2 = 0.92).

Conclusions: These results demonstrate that treatment differences in time to progression endpoints (TTP/PFS) observed in MBC trials are expected to coincide with differences in OS as previously established in other tumor types.

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Lapatinib plus capecitabine versus capecitabine alone for ErbB2-positive metastatic breast cancer (MBC) – Quality of Life (QOL) assessment

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Background: A Phase III randomized open-label multicenter study compared the treatment of lapatinib plus capecitabine (L+C) versus capecitabine alone (C) in adult women with ErbB2+ MBC who had received prior therapy which included an anthracycline, a taxane and trastuzumab. The study was closed early to new enrollment after 399 subjects when the primary endpoint was achieved at an interim analysis. This analysis focuses on the impact of treatments on health-related QOL.

Methods: QOL was assessed using the Functional Assessment of Cancer Therapy-Breast (FACT-B) questionnaire and the EuroQol (EQ-5D) questionnaire. Outcome measures included the FACT-B total score, FACT-general (FACT-G) score, trial outcome index (TOI) score, EQ-5D utility score, and EQ-5D visual analog scale (VAS) score. Higher scores indicate better QOL. Patients completed the questionnaires at the screening visit, every 6 weeks for the first 24 weeks, every 12 weeks thereafter and at study withdrawal. Changes from baseline scores were analyzed for the ITT population using analysis of covariance with baseline value as a covariate. Missing post-baseline data were imputed using the last observation carried forward method.

Results: The study randomized 198 subjects to the L+C arm and 201 subjects to the C arm. At the enrollment close, nearly half of the subjects had completed the Week 12 assessment and one-fifth had completed the Week 24 assessment. Point estimates for all scores were generally higher