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Poster

Assessment of Circulating Tumor Cells and Serum Markers for Progression-free Survival Prediction in Metastatic Breast Cancer: a Prospective Observational Study

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Introduction: Circulating tumors cells (CTC) have been recently proposed as a new dynamic blood marker whose positivity at baseline is a prognostic factor and whose changes under treatment are correlated with progression-free survival (PFS) in metastatic breast cancer patients. However, serum markers levels are also used for the same purpose, and no clear comparison as been reported to date.

Methods: The IC 2006-04 enrolled prospectively 267 metastatic breast cancer patients treated by first line chemotherapy and confirmed that CTC levels are an independent prognostic factor for PFS and Overall survival (OS). A secondary pre-planned endpoint was to compare prospectively the positivity rates and the value of CTC (CellSearch®), of serum tumor markers (CEA, CA 15-3, CYFRA 21-1), and of serum non-tumor markers (LDH, ALP) at baseline and under treatment for PFS prediction, independently from the other known prognostic factors, using univariate analyses and concordance indexes.

Results: 90% of patients had at least one elevated blood marker. Blood markers were correlated with poor performance status, high number of metastatic sites and with each other. In particular, CYFRA 21-1, usually used in lung cancer, was elevated in 65% of patients. 86% of patients had either CA 15-3 and/or CYFRA 21-1 elevated at baseline. Each serum marker was associated, when elevated at baseline, with a significantly shorter PFS. Serum marker changes during treatment, assessed either between baseline and week 3 or between baseline and week 6-9, were significantly associated with PFS, as reported for CTC. Concordance indexes comparison showed no clear superiority of any of the serum marker or CTC for PFS prediction.

Conclusions: For the purpose of PFS prediction by measuring blood marker changes during treatment, currently available blood-derived markers (CTC and serum markers) had globally similar performances. Besides CEA and CA 15-3, CYFRA 21-1 is commonly elevated in metastatic breast cancer and has a strong prognostic value.

Trial registration: NCT00898014

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Poster

Influence of the Progesterone Receptor On the Prognosis of Breast Cancer in Interaction with Other Prognostic Factors

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Introduction: The expression of the estrogen receptor (ER) and/or the progesterone receptor (PR) is a predictive factor for the response to endocrine treatment and to chemotherapy in primary breast cancer. Knowledge about the prognostic relevance of the PR is rare and partly controversial. Aim of this retrospective study was to analyze the prognostic relevance of PR.

Methods: Between 1995 and 2008, data from 5,144 patients with heterogeneously treated primary breast cancers have been collected in 3 German university hospitals.

The laboratories used immunohistochemical assays for the investigation of the ER and PR.

The PR-expression was correlated with patient and tumor characteristics.

For each outcome parameter overall survival (OS), distant disease free survival (DDFS) and local recurrence free survival (LRFS) cox proportional hazard models were built. Furthermore the effect of the PR status was analyzed according to tumor subgroups.

Results: PR status was associated with a more favourable OS, DDFS and LRFS in the univariate analysis. PR remained an independent prognostic factor for OS and DDFS but not for LRFS in the cox proportional hazard model.

For OS and DDFS the prognostic effect of PR seemed to be consistent among the subgroups and was significant for most of them. Comparing subgroups there was a difference between the HR for ER negatives and ER positives. In ER negative tumors the prognostic effect of the PR seemed to be larger (HR = 0.40; 95% CI: 0.25-0.63) than in ER positives (HR = 0.68; 95% CI: 0.53-0.87). For all other subgroups there seemed to be no interaction between PR status and the other prognostic factors.

Conclusion: PR positivity results into a similarly favourable prognosis in ER negative and ER positive patients. ER positivity alone seems not to be sufficient to define a group of patients with the most favourable prognosis. On the contrary, patients with ER positive, PR negative tumors have a significantly deteriorated prognosis and seem to be a patient group, which should be investigated concerning drug resistance mechanisms.

Thursday, 22 March 2012

12:30-13:30

POSTER SESSION

Side Effects of Treatment, Follow-up, Management and Care, Psychosocial Aspects

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Poster discussion

Sexual Wellbeing and Breast Cancer in Australia: the Experiences of Women and Health Professionals

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Background: The purpose of this research was to identify the impact of breast cancer on women's sexual wellbeing, their information and support preferences, and the needs of health professionals to better assist women.

Material and Methods: Two mixed method, national, online surveys were distributed, one to women with breast cancer, and one to health professionals.

Results: The survey with women was attempted by 2210 participants, with an 88.9% completion rate. The average age for participants was 54 (range 18-84). 80% were living with a partner. The average time since first diagnosis was 4 years. 82% reported that breast cancer had affected their sexual relationship 'dramatically', 'considerably', or 'somewhat', with the majority reporting relationship difficulty or breakdown. 65% (1292) had not spoken to anyone about sexual wellbeing issues. 69% (907) would prefer to speak to their partner. 59% (1117) had not obtained information about breast cancer and sexual wellbeing, although 68% (1287) would like to. 'Very important' topics for information included vaginal dryness (680), relationship changes (597), difficulties in being aroused (549), hot flushes (529) and information for partners (524).

The survey with health professionals was attempted by 159 participants, with a 90.6% completion rate. 65.2% of respondents were breast care nurses. 89% of respondents consider sexual wellbeing to be a 'very important' issue. 33.8% 'always' raise it with women. The most common aspects raised are physical changes including vaginal dryness (87%), body image and physical attractiveness (87%), menopausal symptoms (84%), and relationship issues (74.6%). Barriers to raising sexual wellbeing include a lack of privacy/inappropriate setting (52.1%), sensitivity to a woman's culture or religion (51.3%), and time constraints and pressures (35.9%). Health professionals reported needing a list of appropriate referral sources (81.5%), fact sheets (81.5%) and information booklets (77%) to help them raise sexual wellbeing with women.

Conclusions: Sexual wellbeing is a significant issue for women with breast cancer, yet many women have not discussed the issue with anyone, and it is not routinely raised by health professionals. Both women and health professionals would like more information on sexual wellbeing and breast cancer. BCNA has now developed a comprehensive booklet on sexual wellbeing and breast cancer to be used by both women and health professionals, which has been extremely well received.