O-26. The effects of Faslodex and Tamoxifen in premenopausal breast cancer

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Aim: The aim of this study was to investigate the effects of pre-operative Faslodex on the breast cancers of premenopausal women and to compare effects with Tamoxifen.

Patients and Methods: 29 patients have been recruited. 16 were randomised to receive 14 days of tamoxifen prior to surgery and 13 were randomised to receive a one-off dose of 750mg of Faslodex (3 × 250mg intramuscular injections) 14 days prior to surgery.

Results: *Oestrogen Receptor (ER) Expression:* Both Faslodex ($p \leq 0.001$) and Tamoxifen ($p = 0.008$) reduced ER expression. The fall in ER was significantly greater with Faslodex ($p = 0.023$).

Progesterone Receptor (PgR) Expression: Faslodex reduced PgR expression significantly ($p = 0.005$) but Tamoxifen had no significant effect ($p = 0.3$).

Proliferation: Both Faslodex and Tamoxifen reduced proliferation significantly. ($p = 0.022$ for Faslodex and $p = 0.017$) for Tamoxifen.

Conclusion: 750mg of Faslodex is effective in premenopausal cancer at down-regulating ER and PgR and reducing proliferation. Further studies in premenopausal women are warranted.

O-27. Influence of hormone replacement therapy (HRT) on Tamoxifen induced menopausal symptoms

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Tamoxifen's role in prevention is limited because of its side-effect profile. Endometrial cancer and thrombotic events are of most concern, but also non-life threatening side effects such as vasomotor symptoms limit its use for prevention.

During the International Breast Cancer Intervention Study (IBIS-I) approximately 70% of women in the tamoxifen arm reported hot flushes but it is not known if HRT will work in the presence of tamoxifen. Here, we investigate the extent to which HRT reduces vasomotor symptoms in women at high risk of breast cancer taking tamoxifen.

Within the first 6 follow-up months, baseline HRT use did not have a significant effect on the occurrence of hot flushes for tamoxifen patients (60.8% HRT vs. 49.2% no HRT, $p = 0.1$) whereas for placebo patients a difference was seen (22.9% HRT vs. 34.3% no HRT, $p = 0.03$). Not surprisingly, never and ex-users of HRT who took HRT in months 0–6 had more hot flushes in that period than those who didn't regardless of tamoxifen use. By month 12, for those who were still reporting hot flushes on tamoxifen use of HRT didn't show an effect in reducing hot flushes; whereas in the placebo group HRT use lead to significant fewer hot flushes.

Overall, HRT use at entry and HRT use during the trial prevented only women in the placebo group from developing hot flushes. Commencing the use of HRT to reduce vasomotor symptoms did not lead to a reduction in hot flushes for women taking tamoxifen.

O-28. Routes of administration in breast cancer: preliminary findings from a patient survey

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Aims: Endocrine treatments for breast cancer such as tamoxifen and fulvestrant have broadly similar efficacy and tolerability profiles but have different routes of administration. Perceptions that patients do not like injections may contribute to the efforts made by industry to produce oral compounds wherever possible, but there is little systematic data to support this view. Here, we investigated breast cancer patients' preference for different routes of administration.

Methods: 208 women, at least 2 years post-diagnosis but with stable disease, who had received ≥1 hormonal breast cancer treatment were recruited from UK cancer centres. They were interviewed in their own homes by trained researchers using a semi-structured interview schedule. Patients provided basic socio-demographic information and details of their breast cancer treatments, co-morbidities, concurrent medications, ease of travel to cancer centre, relationship with healthcare professionals, and attitudes toward injections. They then considered various scenarios with two unnamed drugs (an oral daily tablet or a monthly intramuscular injection) and were asked for their preferences and reasons for their choices.

Results: Overall, 78/208 pts (37.5%) reported anxiety about receiving an injection but only 28(13.5%) had ever had a needle phobia. Fifty-one pts (24.5%) said they would prefer an injection over a tablet, 131(63%) would prefer a tablet and 26(12.5%) were undecided. However, 126 pts (61%) said they would prefer an injection if it was associated with fewer hot flushes and 155 pts (74.5%) would prefer an injection even if this was in both buttocks if it offered improved efficacy over a tablet. The main reason given for both injection and tablet preferences was convenience. Interestingly, 22/51 (43%) of those preferring injections said that this was to ensure adherence. Approximately 48% of all patients currently receiving medications admitted to forgetting to take their tablets more than once or twice a week.

Conclusions: It is essential that patients are fully informed about treatment options for breast cancer as their beliefs, attitudes and preferences have implications for adherence.

O-29. Predicting survival after 5 years of Tamoxifen

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Recent studies suggest that prolonging hormone therapy by switching to an aromatase inhibitor after 5 years of Tamoxifen may be associated with a survival advantage. This study aims to identify women who may benefit from such extended therapy.

Between Jan 1990 and Dec 1999, 563 patients with primary operable breast cancer completed 5 years of Tamoxifen therapy after local treatments. 22 patients also had chemotherapy. 2 patients were lost to follow-up. Multivariate analysis of factors predicting survival once Tamoxifen therapy had been completed was performed.

Overall 5-year survival after completing 5 years of Tamox-

ifen was 88%. By NPI group 5-year survival in the moderate 1 group was 90%, in the moderate II group it was 86% and in the poor prognostic group it was 77%. Tumour grade ($p = 0.03$) and node stage ($p = 0.01$) were significant independent predictors of survival. Tumour size, H-score, and Age were non-significant.

The 2 most heavily weighted factors in the NPI (grade and nodal stage) remain the most significant predictors of outcome after 5-years of Tamoxifen. Patients in the poor prognostic NPI group may be considered for extended hormone therapy.

O-30. Survival of elderly patients with breast cancer treated with primary Tamoxifen therapy

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Between 1990 and 2005, 181 elderly women over the age of 70 years (mean 82 years), who were either unfit for anaesthesia or reluctant to consider surgery were treated with Primary Tamoxifen therapy (PT). (49 patients under 70 years were also treated with PT, because of extensive disease or severe co-morbidity).

Patients underwent frequent and indefinite clinical follow up, to monitor tumour size and identify any possible need for change in management.

Patient survival and causes of any deaths have been studied using cancer registry data.

The overall 5 year survival of these patients is 34% and 10 year survival is 7%. 123 patients died at a mean of 31 months (7 days–103 months). 55 (45%) died from causes other than breast cancer. 47 patients (26%) required further treatment in view of disease progression. 32 women (18%) underwent limited surgery, 7 had radiotherapy (4%) and 8 had a change of hormonal treatment (4%).

The overall survival of these elderly patients is not unduly poor. Many women were considered to have died with the disease rather than as a result of the breast cancer. Patients receiving PT require careful follow up as one in four may require a change of management.

O-31. Trial of mastectomy versus Tamoxifen for treating elderly patients with operable breast cancer – results after a 20 year follow up

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Background and Aims: This randomised trial of operable breast cancer treated by either wedge mastectomy or tamoxifen earlier showed a reduced incidence of local, regional and metastatic recurrence in the mastectomy group at 24 months follow up. 135 consecutive patients with breast cancer aged over 70 yrs and fit for surgery, with operable primary breast cancers were randomised.

68 were allocated to tamoxifen (Tam) and 67 to the mastectomy [(wedge mastectomy and excision of symptomatic axillary lymph nodes), (Mx)] Tam received continuous treatment with tamoxifen 20mg twice daily and wedge mastectomy on local progression. Mx received further excision or radiotherapy for locoregional recurrence and/or when local treatments were exhausted or metastatic disease diagnosed, tamoxifen.

Results: At 20 yrs follow-up only 2 patients of 131 are alive and this is therefore the final data on this trial.

	Tamoxifen group $n = 66$	Mastectomy group $n = 65$
Local recurrence	45 (68.1%)	16 (24.6%)
Regional recurrence	20 (30.3)	24 (36.9)
Distant metastases	23 (34.8)	27 (41.5)
Median time to death (mths)	73 ± 10	74 ± 18

Conclusions: There is no significant difference in regional recurrence, distant metastases or overall survival between the mastectomy and tamoxifen group in elderly patients with breast cancer at 20 yrs follow-up. In keeping with earlier reports, there has remained a significantly lower incidence of local recurrence in the Mx group.

O-32. A computer programme to calculate for the individual: the expected improvement in survival chance from adjuvant therapies

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The EBCTCG overviews of adjuvant therapies provide figures of relative risk reduction (RRR). Applied to the survival chance of the individual, shown by the Nottingham Prognostic Index (NPI) the absolute improvement expected from therapies for that individual, may be calculated.

The baseline figure ("observed 1980–86") is the survival in NPI groups in patients treated without any adjuvant systemic or local (RT) therapies. (1) The "Expected" figures are the effects on these from the relative risk reductions (RRR) demonstrated in the EBCTCG overviews for each therapy.

Example: Women 50+, % 10 year survival

NPI Group	Observed 1980-86 No Adjuvant (local, regional nor systemic)	Expected	
		Tam 5 yr (ER+) RRR 27%	CMF (all) RRR 11%
EPG	84	89	86
GPG	63	73	67
MPG I	59	70	64
MPG II	43	59	49
PPG	15	39	24

Patient age and pathological tumour characteristic (grade, LN stage, size, ER, VLI) must be entered. The expected improvements will be given for individual NPI values rather than for groups (Blamey, 2005).

Survivals have improved in the 1990's in all prognostic groups to a greater degree than predicted by the EBCTCG estimate of risk reduction for adjuvant systemic therapies.

A further calculation is given for the extra gain expected from improved local management (free margins, case selection for breast conservation, selective local and regional RT or clearance).

The combined figure gives the present day expected survival from modern therapeutic management.