A woman in the EPG gains 1 month on average (or) only a 1% improved 10 year survival chance.

Tables will be presented for HT (ER+) and CT, at ages 45, 55 and 65.

O-15. SURGEON WORKLOAD AND SURVIVAL OF BREAST CANCER PATIENTS

J. Stefoski-Mikeljevic, C. Johnston, R. Sainsbury, D. Forman, R. Haward. *Northern & Yorkshire Cancer Registry, Leeds, UK*

The aim of this study was to determine the variation in surgeon workload over time and to assess the impact of workload on survival. This was a retrospective population-based study. Survival and multivariate analyses were used to assess 5-year survival and relative risk of death, adjusting for socio-economic and clinical variables. 16,092 breast cancer patients diagnosed and treated by surgery in the Yorkshire region between 1986 and 1994 were included in the study. Overall, surgeons with a low mean annual workload of less than 10 managed 6% of patients, surgeons with a workload of 10–29 treated 26%, 30–49 33%, while 35% were managed by surgeons with the highest workload of more than 50. Over the study period, there was a trend to increasing numbers of patients being treated by surgeons with higher workloads. During 1986–88, surgeons managing 50 or more patients per year treated 26% of cases. By 1992–94, this had increased to 42%.

Patients treated by the higher workload surgeons had significantly better survival. Survival 5 years from diagnosis was 58% in the lowest consultant workload category compared to 67% in the highest workload category. This difference could not be explained by differences in case-mix (age, disease extent, socio-economic profile and time period) or treatment. The findings suggest that management by surgeons with higher workloads have a positive effect on survival from breast cancer.

O-16. FACTORS UNDERLYING THE IMPROVEMENT IN MORTALITY FROM BREAST CANCER

R.W. Blamey, M. Mitchell, D.A.L. Morgan, I.O. Ellis, S. Pinder, C.W. Elston. *Nottingham City Hospital, UK*

Possible reasons for the fall in mortality from breast cancer in the UK are earlier detection and adjuvant therapy.

Prognostic factors at presentation, the Nottingham Prognostic Index (NPI) and the 10 year case-survival (OS) have been examined for women diagnosed in 1980–1984 (prior to both the use of adjuvant therapy and the introduction of screening) and 1990–1994 (table).

Age 50+					
	1980–1984		1990–1994		
NPI	%	OS (n)	%	Expect. OS (n)	Ob. OS (n)
GPG	29.5	23.6	41.6	33.2	37.0
MPG	56.2	30.3	46.4	25.1	33.4
PPG	14.2	2.1	12.0	1.8	3.4
Total	100	56.0	100		73.8

In women aged 50–70 10 year OS rose from 56% to 74%. A higher percentage of cases in NPI Good Group (GPG) accounted for 13% of this (29% diminution in mortality).

Improvement occurred WITHIN the moderate group (MPG). The use of Tamoxifen accounted for 5% of the increase (14% diminution in mortality in those treated by Tamoxifen).

In women aged <50 survival rose from 57% to 74%. Earlier diagnosis accounted for only 3%, hormonal therapy (HT) for 9% and chemotherapy (CT) for 4% (a 47% fall in mortality for recipients of HT and 29.5% for recipients of CT).

O-17. A REVIEW OF AROMATASE INHIBITORS USED FOR NEOADJUVANT ENDOCRINE THERAPY

J.M. Dixon, T.J. Anderson, W.R. Miller. *Western General Hospital, Edinburgh, UK*

Although neoadjuvant chemotherapy has been widely used, neoadjuvant endocrine therapy had been used much less frequently. In Edinburgh we have evaluated the aromatase inhibitors letrozole, anastrozole and exemestane and have now treated over 80 patients with these agents. Letrozole, anastrozole and exemestane have been shown in this initial small series of patients to produce a median reduction in tumour volume of >80%. Using ultrasound, all 3 aromatase inhibitors produced a median reduction in tumour volume of >75% compared to a 48% reduction in median volume in patients treated with tamoxifen. However, with these small number of patients, it was not possible to make any direct comparisons between different agents.

Following our initial observations a randomised trial was performed and reported with letrozole in 337 postmenopausal women with invasive breast cancer, all of whom had ER or PgR positive tumours and who were not eligible for breast conserving surgery. In an intention to treat analysis 154 were treated with letrozole 2.5 mg/day for 4 months and 170 with tamoxifen 20 mg/day for 4 months. Clinical response was 55% for letrozole versus 36% for tamoxifen, $p < 0.001$. Imaging responses confirmed the superiority of letrozole 35% versus 25% on ultrasound, $p = 0.042$ and 34% versus 16% on mammography, $p < 0.001$. Breast conserving surgery was possible in 45% treated by letrozole compared with 35% in the tamoxifen group, $p = 0.022$. Odds ratio for response to letrozole was 6.5 if the tumour was ER positive versus 5.3 for tamoxifen. It has also been reported in patients who were erbB1 and/or erbB2 positive the odds ratio of a response was 28 in favour of (4.5–177) responding to letrozole compared with tamoxifen. This study demonstrates letrozole is superior to tamoxifen in the neoadjuvant setting. Further studies are ongoing with other aromatase inhibitors. Currently, an aromatase inhibitor is the neoadjuvant endocrine agent of choice in postmenopausal women with ER positive breast cancers.