Unit of Randomisation: Individual women.

Intervention: Eligible women are randomly allocated to either an intervention group who are invited to attend the rapid diagnosis clinic or to a control group who are invited to the routine outpatient clinic.

Outcome Measures: (1) Psychological morbidity — at baseline, 24 hours, 3 weeks and 3 months post attendance using validated scales (2) Clinical morbidity — false negative rate and benign to malignant ratio (3) Cost — average and marginal cost per women attending.

Findings: 321 women have been recruited so far. Preliminary results from the comparison of psychological and clinical morbidity will be presented.

### PP-4-29

# The Role of Digital Processing Mammography in Diagnosis of Breast Cancer

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Methods of Imaging Processing Systems are promising a lot in maximizing diagnostic sensitivity of mammography. In order to determine the role of digital processing mammography in diagnosis of breast cancer, we studied 50 women with normal mammography and another 50 with breast cancer at Radiation Oncology Department of Medical School and Clinical Oncology Dept. of Nursing School of T.E.I.. Digitalization of mammography has been done using a CCD camera (1024 × 1024 pixels) and the "Image-Pro software in an IBM-compatible Personal Computer (AT-386). In these cases sensitivity of mammography before digitalization was 81% and specificity 70% and after measurements of perimeter, area, counter and density of breast lesions and clusters of microcalcifications, sensitivity was 88% and specificity 76%. According to these study, the role of digital processing mammography was proved to be clinically valuable in diagnosis of breast cancer, because it improves the sensitivity of mammography (P < 0.05), especially in cases with multifocal disease, the pseudocolor menu maximizes the friendliness of the method and it offers the database and telecommunication facilities.

### PP-4-30

# Breast Cancer: A Retrospective Study of Two Ethnic Groups in the Center of Israel

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Analysis of a 21 years retrospective study of all new breast cancer patients at the "Kaplan" Medical Center was performed. In this region there are two homogenous major ethnic groups of women — of Ashkenazi or Sepharadi origin (51.1% vs. 48.9%, respectively), which were studied according to their age, stage of disease and ethnicity. We found that breast cancer incidence in the Ashkenazi group was 2.4 folds higher than in Spharadi group (P < 0.04). The highest incidence was found in stage II in postmenopausal women in both groups. No significant differences were found in pre-menopausal women, although the occurrence of breast cancer was more frequent in young Sepharadi women. Interestingly, the number of post-menopausal Ashkenazi women, in whom the disease was at stages I–III was significantly higher, 2–3.5 folds higher than in Sepharadi women. The possible influence of genetic, economic and social differences between the two groups will be discussed.

### PP-4-31

# The Improvement of Aspiration Biopsy Cytology by Ultrasound Guided High Power Aspiration

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The efficacy of Ultrasonically guided fine needle aspiraton biopsy cytology with high power aspiration machine (US-ABC) was compared with that of the conventional ABC using usual 20 ml cylinde. US-ABC system made it possible to puncture under imaging and aspirate many cells. From 1992 to 1994, 281 breast tumors were evaluated with cytological and pathological findings, 78 tumors by US-ABC and 203 tumors by conventional ABC. The sensitivity of US-ABC was 93%, the specificity was 62% and the predictive value of a positive diagnosis was 89%. Those of conventional ABC was 78%, 62% and 81%, respectively. A total of 208 cases of breast cancer were evaluated by the tumor size. The US-ABC resulted in positive rate of 80% for tumor less than 1.0 cm, 93% for 1.1–2.0 cm and 100% for larger than 2.1 cm, respectively, and the conventional ABC resulted in 54%, 77% and 86% respectively. These results indicated US-ABC system was a useful

method to improve the diagnosis of breast cancer, especially for the tumors less than 1.0 cm.

## PP-4-32

# Breast Cancer in Albania: Incidence and Preliminary Results of Screening

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Albanian population, as known, amount at 3.5 millions and has been isolated from the rest of european countries for almost 40 years, without a real industrial development. Incidence of breast cancer in Albania has been studied by the University of Tirana in period 1984-86 on a series of 590 cases with an annual average of 173 cases, 169 females and 4 males. Within Albanian women, breast cancer represents 19% of all tumors, 24% excluding skin tumors. Albania's data, according to the standardization over the world population, reflect a state of low incidence (14/105). We must point that 70% of female population in Albania is in the range of 0-34 yrs. The annual incidence of the urban areas is 3.3 times higher than in rural areas (21.6 imes 105 vs 6.4 imes 105). These data coming from retrospective studies based on clinical observations because of until September 1995 there was no senologic centre in Albania. In this period with a grant of E.U. we started a project regarding the study of incidence of breast cancer in Albania. The study intends examining a sample of 6000 Albanian women which about corresponds to 10% of Tirana's population.

Women underwent a mammography and clinical examination. It's obviously remarkable that since mammography has been introduced in this country for the first time none of the enrolled had ever undergone before a mammographical examination, therefore this population must be considered as an unexplored population. Mammography is performed in two views: Medio-lateral and cranio-caudal. Processing and interpretation are performed on site. A double reading of the mammograms is undertaken at distance in Italy. After the X ray examination doubtful cases underwent clinical examination, ultrasound and F.N.A.B. if necessary. Until now 4000 mammographic examinations have been performed and 40 cases of breast cancer found. Final results after one year will be available in the next September at the end of the study.

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### PP-4-33

#### Surveillance for Contralateral Breast Cancer: The Mode of Diagnosis and Subsequent Stage

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Background: Women treated for breast cancer are at increased risk for a 2<sup>nd</sup> primary. This risk remains equal in time. For this reason it is advised to follow women after treatment with curative intent for a primary tumour for live by at least annual physical examination and mammography.

Aim: To determine method (breast self examination – BSE, physical examination by physician – PE – or annual mammography – MG) and stage of contralateral breast cancer (CLBC) in women at routine follow up.

Method: Retrospective analysis of 161 pts with CLBC diagnosed between 1976–1994. In all, in this period 344 pts with CLBC were seen at the NKI/AvL, but 183 pts with synchronous or CLBC with in one year, with distant metastasis, ipsilateral local or regional relapse, LobClS, or who were — partially — followed elsewhere were excluded.

Results: From the 161 CLBC, first suspicion was found by routine MG in 37%, by routine PE by the attending physician in 41%, and 22% by the pt herself. Disease stage was in 53% more favorable then the first cancer, in 21% equal to and in 23% tumor stage was less favorable. Data on pathological tumor stages and outcome will be presented.

Conclusion: Intensive surveillance by BSE, regular PE and annual MG results in 2/3 of the CLBC diagnosed on clinical grounds and only 1/3 by routine MG. Only half of CLBC is in a more favorable stage compared to the first breast cancer.

## PP-4-34

#### Axillary Lymph Nodes in Breast Cancer: Assessment with 'Power' Doppler Ultrasound

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Previous studies have indicated that ultrasound colour doppler imaging