

rotation in 16%. Symptoms from the arm included swelling in 25%, reduced motility in 40%, fatigue in 44% and pain in 32%. Significant predictors for both objective and subjective complaints were high age (>60 years) and high number of removed lymphnodes. **Conclusion:** Axillary dissection leaves patients with considerable arm morbidity.

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POSTER

### RESULTS OF LOCALLY ADVANCED BREAST CANCER TREATMENT

*E.A. Korotkevich, T.G. Milevskaya*

*Research Institute of Oncology and Medical Radiology Health Ministry of the Republic of Belarus, Minsk, Belarus*

During 1982–1992 469 patients with locally advanced non-inflammatory breast cancer (T4N0—66, T4N1—269, T4N2—134) were treated using the following regimen: radiotherapy (RT) + radical mastectomy + RT + chemotherapy (5-Fluorouracil + Cyclophosphan) + hormonotherapy (ovariectomy, Tamoxifen). The medical age was 50 years. Preoperative RT was carried out at a single dose of 4 Gy to a total dose of 20 Gy for 5 days. 285 patients received concurrent additional irradiation of the tumor at a total dose of 10 Gy. Postoperative RT was performed using a single dose of 2 Gy, 10–12 days, total dose—20–24 Gy.

The cumulative 5-year and 10-year survival rate amounted to 57 + 2% and 39 + 4% respectively. 5-year survival without recurrence made up 46 + 2%, 10-year—30 + 3% 5-year loco-regional tumor control was in 94 + 1% of the patients, 10-year—90 + 2%.

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POSTER

### TAMOXIFEN ALTERS IMMUNOCOMPETENCE IN BREAST CANCER PATIENTS

*Z. Kusić, A. Bolanča, N. Đaković, J. Lukač*

*Department of Oncology and Nuclear Medicine, University Hospital "Sestre milosrdnice", Zagreb, Croatia*

Tamoxifen (TM) has been described as having also mechanisms of action other than antiestrogenic, interfering with other events not mediated by estrogen receptors, and probably acting as an immunomodulating agent. In this work, natural killer (NK) cell activity and granulocyte (G) and monocyte (Mo) phagocytic functions were determined in 27 patients with ductal invasive breast carcinoma, stage I–III, before, 7 months and 14 months following postsurgical telecobalt radiotherapy (RT, total dose 40–55 Gy), divided into two groups, one of them (13 patients) receiving tamoxifen and the other one (14 patients) free of further therapy (CONTR). There was no difference in any function in CONTR group during the follow up. In TM group, slightly depressed 7 months after RT, NK cell activity increased at 14 months post-RT. G ingestion declined 7 months post-RT and remained depressed. Even Mo ingestion decreased 14 months after RT. The results obtained indicate longer-lasting suppressive effect of TM therapy on phagocytic functions.

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POSTER

### BREAST CANCER IN ELDERLY: MANAGEMENT AND CLINICAL OUTCOME IN 317 PATIENTS

*L.M. Martin, E. Calitchi, Y. Ormezuine, F. Feuilhade, B. Brun, L. Chosièrre, P. Piedbois, J.-P. Le Bourgeois*

*CHU Henri Mondor, Créteil, France*

This is a retrospective study including 317 patients aged 70 years and over referred to our department between 1980 and 1990 for breast cancer. 113 out of 238 women with resectable disease (84 stage I–II, 154 stage IIIa) underwent a conventional treatment (surgery and/or radiation therapy), 64 underwent a no conventional combination of treatment (limited surgery and/or hormone therapy and/or radiation therapy), 40 underwent a single no conventional therapy (hormone therapy, radiotherapy, or limited surgery), 21 were not treated. 79 have a no operable extended disease (47 stage IIIb, 32 stage IV) and were treated with a combination of treatment. Five years local-regional control in patients with resectable breast carcinoma was significantly higher (76%) in conventional treatment group than in other therapeutic groups (48% for no conventional combination treatment and 34% for single treatment). No significant difference in 5 years survival rate was noted between conventional therapy group and no conventional combination therapy group (respectively 64 and 60%) whereas 5 years survival rate was significantly lower in single therapy group (39%) (chi square test). In patients with resectable disease, 29% of the deaths were related to breast carcinoma in the conventional treatment group, 37% in the combination group and 84% in the minimal treatment group. Conventional treatment did not

lead to a higher frequency of complication than that of younger population. 5 year survival rate was 65% in the extended disease group. High survival rates and frequency of deaths related to breast cancer call for validated guidelines in elderly. Combinations of no conventional treatments give good 5 years survival rates emphasizing the interest of this therapeutical approach.

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POSTER

### DUCT CARCINOMA IN SITU (DCIS) OF THE BREAST: RESULTS OF TREATMENT BY CONSERVATIVE SURGERY (CS) AND RADIOTHERAPY (RT)

*F. Moreno, A. Martinez, J. Pera, C. Gutierrez, R. Galiana, M.D. Arnaiz, M. Cambray, S. Marin, J.C. Menendez, L. Petriz, D. Rodriguez, S. Villa Rad. Oncol. Department CSU Bellvitge, 08907 Hospitalet LL. Barcelona, Spain*

To determine local control, survival and cosmesis in women with DCIS treated between 1985 and 1994 by CS and RT we analyzed the results of treatment in 44 patients. All patients had CS; 43 patients had RT to the entire breast and 36 had a sequential boost to the tumour bed. One of the 44 patients had a minimum pathologic margins at time of excision. The mean dose to the whole breast and primary tumour site was 50 Gy and 61.8 Gy, respectively. The mean follow-up was 36 months. **Results:** 3 pat. failed, only one in the same quadrant. The mean time to failure was 38 months. All patients are alive; two are free from disease after rescue surgery and the other one has nodal, pulmonary and bone metastases, being in chemo-hormonotherapy. Cosmesis are excellent or totally acceptable in most of the patients. We achieve high local control, survival and cosmesis.

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POSTER

### POST-MASTECTOMY RADIOTHERAPY (RT) IN HIGH-RISK PATIENTS

*D.A.L. Morgan, J.K. Berridge, A. Mitchell, A.J. Moloney, R.W. Blamey, T.O. Ellis, C.W. Elston*

*Departments of Clinical Oncology, Surgery & Histopathology, City Hospital, Nottingham NG5 1PB, U.K.*

After mastectomy, the combination of Grade III tumour with nodal involvement incurs a high risk of local and regional relapse. We have previously reported (ISRO Meeting, Kyoto 1992) initial findings from a trial in randomly allocating such patients to receive postoperative RT (45 Gy in 15 fractions over 3 weeks), or not. From 9/85 to 9/91, 77 patients were recruited. All patients now have a minimum of four years from randomisation.

The results are:

	RT group (n = 36)	No-RT group (n = 41)	"p" value
Locoregional recurrence			
5 years	21%	64%	<0.0001
Free of any recurrence			
5 years	41%	21%	0.06
Survival			
5 years	56%	42%	0.23

The benefit of RT in controlling locoregional disease is re-emphasised by these mature data. The trial was closed after a short period of recruitment, having achieved significance for this end-point. The possibility that RT might have a wider role—in prolonging overall disease-free interval (and possibly survival)—now emerges, but cannot be unequivocally established from this study.

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POSTER

### TREATMENT RESULTS IN BILATERAL BREAST CARCINOMA COMPARED TO UNILATERAL BREAST TUMORS

*St. Mose, I.A. Adamietz, F. Saran, C. Thilmann, R. Pahnke, H.D. Böttcher*

*Department of Radiotherapy and Oncology, University Hospital Frankfurt/Main, Germany*

**Purpose:** A review of published data does not provide a certainty whether survival rates are comparable or worse in bilateral breast cancer patients versus women with an unilateral tumor. Therefore, results of therapy in one-sided and both-sided breast carcinoma were retrospectively analysed.

**Patients:** From 1977–82 (follow-up 5–12 years) 531 breast cancer patients (T1-4N0-3M0) were treated by mastectomy (n = 416) or conserving surgery (n = 115). Postoperative radiotherapy was performed in