

Results: 37,015 cases were available. Median follow-up was 94 months (range 0–167), age 58 years (21–100), tumour size 24 mm (0–930), number involved nodes 3 (1–75), nodes examined 15 (1–90). Ten-year overall survival (OS) was 51.9% (95% confidence interval 51.3–52.5). By TNM, OS ranged from 61.0% (60.2–61.8) in pN1, to 28.5% (28.5–29.9) in pN3, with $\text{Chi}^2 = 2777.7$. By LNR, OS ranged from 62.9% (62.1–63.6) in low-LNR to 22.5% (21.1–23.9) in high-LNR, $\text{Chi}^2 = 4499.9$. Table 1 shows OS when TNM and LNR were applied to cases previously staged with AJCC3. Figure 1 displays wider prognostic separation by LNR.

Table 1: AJCC3

	No. of cases	pN1 10yOS			TNM Chi^2	LNR 10yOS			LNR Chi^2
		pN1	pN2	pN3		Low	Mid	High	
Stage II	27,525	63.6%	48.5%	34.5%	1326.4	64.3%	47.4%	29.5%	1783.3
Stage III	6,128	45.5%	36.0%	24.2%	238.7	50.9%	35.4%	17.8%	615.6
Stage IV	1,301	9.4%	9.1%	8.9%	0.4	18.0%	10.7%	4.8%	83.4
Unstaged	2,061	64.9%	50.4%	33.9%	132.1	69.3%	47.2%	32.3%	221.9%

Conclusion: LNR consistently improved nodal classification. Further investigations on its role for staging are warranted.

273

ORAL

Tumour positive sentinel node findings in patients with DCIS

M. Leidenius¹, K. Salmenkivi², P. Heikkilä², K. von Smitten¹. ¹Helsinki University Central Hospital, Breast Surgery Unit, Helsinki, Finland; ²Helsinki University Central Hospital, Department of Pathology, Helsinki, Finland

Introduction: Ductal carcinoma in situ (DCIS) is nowadays a common finding in patients with screen detected breast cancer. There are no axillary metastases in DCIS, by definition. However, even the most meticulous histological examination of the mastectomy or breast resection specimen may fail to reveal invasion. Our aim was to evaluate the prevalence of sentinel node metastases in patients with DCIS.

Methods: Altogether 1470 patients underwent sentinel node biopsy between April 2004 and March 2005 in the Breast Surgery Unit of Helsinki University Central Hospital. 93 of them had DCIS, with or without microinvasion in the in the breast resection or mastectomy specimen. These 93 patients were included in the study. A prospectively collected database was used.

Results: Tumour positive sentinel node findings were detected in 6 (6%) patients. One patient had a 7 mm metastasis and another a 1, 95 mm micrometastasis. The remaining four patients had isolated tumour cells only. Four patients had tumour positive sentinel findings in the intraoperative diagnosis. They underwent axillary clearance without further metastatic findings. Axillary clearance as a second operation was omitted in two patients with false negative intraoperative findings. Both of them had isolated tumour cells in a single sentinel node in the postoperative diagnosis.

Conclusions: The majority of the tumour positive sentinel node findings in patients with DCIS are micrometastases or isolated tumour cells only, without further metastases in the axillary clearance specimen. Apart from signs of missed invasion, these findings may represent tumour cells transported to the nodes by passive mechanisms due to preoperative breast manipulation. When micrometastases or isolated tumour cells are encountered in patients with pure DCIS in the breast resection or mastectomy specimen, axillary clearance is not warranted.

274

ORAL

French National Survey on DCIS; analysis of clinico-pathological features and treatments in 1289 patients.

B. Cutuli¹, C. Lemanski², A. Fourquet², A. Bremond², B. De Lafontan², R. Payan², R. Jourdan³. On Behalf of The French DCIS Study Group. ¹Polyclinique De Courlancy, Reims, France; ²French DCIS Study Group, Paris, France; ³Astra Zeneca, Rueil, France

Introduction: DCIS represents 10–15% of all breast cancers (BC), but its treatment has changed over the past 20 years.

Material and methods: A prospective, nationwide survey on pure DCIS was conducted in 77 centres in France from March 2003 to April 2004, to assess epidemiological, radiological, pathological features and treatment options. 1289 patients were evaluable: 53% were treated in cancer centres, 28% in private clinics and 19% in University hospitals. Median age was 56 years.

Results: Conservative surgery alone (CS), CS with radiotherapy (CS+RT) and mastectomy (M) were performed in 99 (7.7%), 797 (61.8%) and 393 (30.5%) patients, respectively. 385 (30.2%) patients had BC family

history. Among 816 menopausal women, 417 (52.3%) underwent hormonal replacement therapy (HRT). Radiological and pathological features are detailed in the table according to treatment groups. In the CS+RT group, a 50-Gy median dose was delivered to the breast, with a 10-Gy boost in 49% of the cases. 170 patients underwent endocrine therapy, 138 by Tamoxifen, 25 by Aromatase Inhibitors and 7 by LHRH agonists. Important inter-regional variations in mastectomy rates (from 22.6% to 39%), RT use after CS (from 81% to 96%) and endocrine therapy (from 6% to 34%) were observed. CS alone was used only in selected cases, with small and low grade tumours, and no comedo subtype.

	CS (%)	CS+RT (%)	M (%)	Total (%)
Mammographically detected	87	90	83	88
Median tumor size	6 mm	11 mm	35 mm	15 mm
Grade				
1	57	22	10	21
2	31	41	36	38
3	12	37	54	41
Comedo subtype	5	22	33	24
ER+	81	74	61	70
PgR+	50	65	50	60
Previous biopsy	72	59	65	62
Surgery				
1 time	94	81	40	70
2–3 times	6	19	60	30
Sentinel node biopsy	7	13	42	21
Axillary dissection	4	5	22	10

Conclusion: These results are globally in accordance with the French DCIS guidelines recently published (www.fnclcc.fr).

Oral presentations (Mon, 31 Oct, 9.15–11.15) Management of advanced breast cancer

275

ORAL

First-line bevacizumab and paclitaxel in patients with locally recurrent or metastatic breast cancer: a randomized, phase III trial coordinated by the Eastern Cooperative Oncology Group (E2100)

K. Miller¹, M. Wang², J. Gralow³, M. Dickler⁴, M.A. Cobleigh⁵, E.A. Perez⁶, T.N. Shenkier⁷, N.E. Davidson⁸. ¹Indiana University Cancer Center, Indianapolis, USA; ²Dana Farber Cancer Institute, Boston, USA; ³Puget Sound Oncology Consortium, Seattle, USA; ⁴Memorial Sloan Kettering Cancer Center, New York, USA; ⁵Rush University Medical Center, Chicago, USA; ⁶Mayo Clinic, Jacksonville, USA; ⁷British Columbia Cancer Agency, Vancouver Cancer Center, Vancouver, Canada; ⁸Johns Hopkins Oncology Center, Baltimore, USA

Purpose: Bevacizumab, a monoclonal antibody to vascular endothelial growth factor (VEGF), inhibits tumour angiogenesis, which is essential for tumour growth. Bevacizumab has been shown to have activity in late-stage metastatic breast cancer (MBC) (Cobleigh et al. Semin Oncol 2003; 30(Suppl 16):117–24; Miller et al. J Clin Oncol 2005;23:792–99). We designed a randomized phase III trial to compare the efficacy and safety of paclitaxel with or without bevacizumab as first-line therapy in patients with locally advanced or metastatic breast cancer.

Methods: Patients were randomly assigned to receive paclitaxel 90 mg/m² on days 1, 8 and 15 of a 4-week cycle, either alone or in combination with bevacizumab 10 mg/kg on days 1 and 15. The primary endpoint was progression-free survival (PFS); response was assessed by RECIST criteria every 3 cycles. The study provided 85% power to detect a 33% improvement in PFS assuming a one-sided type one error of 2.5%, requiring that 650 patients be recruited.

Results: A total of 722 patients were enrolled between December 2001 and May 2004. Treatment arms were well balanced for median age (55 vs 56 years), disease-free interval (≤ 24 months in 41% of patients in each arm), ER status (63% and 64%), number of disease sites (29% and 28%) and exposure to adjuvant chemotherapy (64% and 65%). Hypertension requiring treatment (13.5% vs 0; $p < 0.0001$), grade 3/4 proteinuria (2.5% vs 0; $p = 0.0004$) and grade 3/4 neuropathy (20.5% vs 14.2%; $p = 0.01$) were more frequent in patients receiving combination therapy. Thromboembolic events and serious bleeding episodes were infrequent ($< 1.5\%$) in both groups. Combination therapy significantly increased response rates in all patients (28.2% vs 14.2%; $p < 0.0001$) and in the subset of patients with