## 2131 POSTER Prognostic variables in metastatic breast cancer: is there an age differential?

S. Attilii<sup>1</sup>, P.P. Bapsy<sup>1</sup>, K. Govind Babu<sup>1</sup>, J. Kausar<sup>2</sup>, C. Ramarao<sup>2</sup>,
S. Sreenivasa Rao<sup>2</sup>, D. Lokanatha<sup>2</sup>. <sup>1</sup>Kidwai Memorial Institute of Oncology, Medical Oncology, Bangalore, India; <sup>2</sup>Kidwai Memorial Institute of Oncology, Pathology, Bangalore, India

**Background:** Whether breast cancer in young is biologically different from elderly is still a debated question. This study was undertaken to delineate prognostic markers to predict risk of recurrence and response to therapy in patients younger than 35 years.

Methods: This is an open labeled, prospective, non randomized study conducted at Kidwai memorial institute of Oncology, Bangalore, a tertiary care hospital with 16,000 new cases/year between January 2004 and December 2006. Patients with diagnosis of limited metastatic breast cancer were enrolled. For each case aged <35 years, 1 control (>35 years) treated during same period was chosen. Pathologic parameters and clinical details noted down with emphasis on previous treatment. Those who are Hormone receptor (HR) positive received Tamoxifen, those with Negative receptor status received Taxanes (3 weekly Paclitaxel 175 mg/m²) alone or in combination with Herceptin (2 mg/kg/wk) if HER-2 is overexpressed. Toxicity was measured by CTC version 3.0, Response – RECIST criteria and quality of life using indigenously developed QOL questionnaire. Overall survival (OS) and Time to tumor progression (TTP) after treatment were calculated by intention to treat analysis.

**Results:** 120 patients were studied. Tumor character and response to therapy are detailed in Table 1.

Conclusion: Compared with older patients, young women have more endocrine unresponsive tumor, familial cancer and likely to present with higher grade, size, Her-2 overexpression, more extensively proliferating and vessel invading disease. Younger patients had shorter disease free interval (early relapse) and had high tumor burden and higher number of metastatic sites at time of relapse. The response rates as well as OS&TTP are worse in younger population. Our findings support that younger patients will have more aggressive disease (BMC Cancer 2004, 4:82). It is in contrast to the other major meta-analysis which showed that age is not an important prognostic factor [Eur J Cancer 2005 Jul; 41(10): 1446–52].

Table 1. Prognostic variables and response character

Variable	Age group	
	young (mean±SD)	old (mean±SD)
Age	30.9±3.4	46.2±10.6
Relapse free interval from end of adjuvant chemotherapy (months)	24.4±6.6	39.6±10.8
Family History	45%	15%
Percentage with menopause after adjuvant CT	20%	45%
HR	35%	55%
HEr2	50%	30%
Tumor size (at initial diagnosis)	5.6±2.8	2.9±1.6
nodes	6.4±2.6	$2.9 \pm 3.2$
Grade	1.8±0.8	1.2±0.6
LV invasion	45%	22%
Number of metastatic sites	2.2±0.8	1.8±0.3
Sum of maximum diameters-cm (RECIST)	14.8±5.4	$9.6 {\pm} 5.8$
Response rates (CR:PR:SD:PD) percentages	15:20:25:40	20:25:30:25
Toxicity including all types (grade III/IV)	33%	50%
QOL improvement from mean	14.8±8.4	11.3±5.4
OS: TTP (weeks)		
HR+/HER2-	45±12/32±10	$92\pm24/68\pm22$
HR-/Her2+	$29 \pm 8/19 \pm 8$	$46{\pm}11/34{\pm}12$
HR+/Her2+	$36{\pm}11/21{\pm}9$	$68{\pm}18/44{\pm}20$
HR-/Her2-	39±14/24±7	77±24/50±16

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Economic impact of adding capecitabine (X) to docetaxel (T) and trastuzumab (H) as first-line therapy for HER2-positive advanced or metastatic breast cancer

A. Bonetti<sup>1</sup>, A. Santoro<sup>2</sup>, P. Ducournau<sup>3</sup>, A. Cirrincione<sup>3</sup>, G. Giuliani<sup>4</sup>, R. Bell<sup>5</sup>. <sup>1</sup>Mater Salutis Hospital, Oncology, Legnago, Italy; <sup>2</sup>Istituto Clinico Humanitas, Oncology, Rozzano Milan, Italy; <sup>3</sup>F. Hoffmann-La Roche, Economic Value Strategy, Basel, Switzerland; <sup>4</sup>Roche S.p.A, Health Economics, Milan, Italy; <sup>5</sup>The Geelong Hospital, Cancer Services, Geelong, Austria

**Background:** A recently published (Wardley et al SABCS 2006) randomised phase II trial (CHAT) compared XTH with TH. The primary endpoint, overall response rate, was similar with XTH (71%) and TH (73%), while XTH showed superior time to progression (TTP) (hazard ratio [HR] 0.70, p = 0.04, median 18.2 vs 13.8 months, respectively) and a trend toward superior progression-free survival (HR 0.72, p = 0.06, median 14.8 vs 12.8 months, respectively). Overall survival data are immature. This analysis evaluates the potential pharmacoeconomic impact of adding X to TH.

**Methods:** Direct medical costs during the trial were estimated from the Italian health system perspective. Actual doses of both regimens were modelled from trial data. Grade 3/4 adverse events (AEs) and related resources were analysed and an expert panel estimated costs of treating major AEs. Other costs relating to laboratory tests and drug administration were assumed to be the same in both arms.

Results: Based on trial data, the estimated total direct medical costs would be slightly lower for XTH: €31,800 vs €32,000 for TH. XTH and TH safety profiles were different: XTH resulted in more grade 3/4 non-haematological AEs than TH but less grade 3/4 neutropenia, complicated neutropenia and febrile neutropenia. The estimated mean AE costs per patient were similar in both arms. An adjusted mean monthly cost was calculated to correct for the difference in number of cycles of each drug in the two arms: XTH drug costs would be ~€200 lower per month than with TH.

**Conclusion:** With the convenience of oral therapy, adding X to TH does not increase the number and duration of infusion visits or increase costs. For patients, physicians and payers, XTH is a good alternative for the treatment of advanced/metastatic breast cancer.

Adjusted mean monthly cost per regimen based on trial data (excluded AEs)

	XTH	TH
Trastuzumab	€2200	€2300
Docetaxel	€1000	€1400
Capecitabine	€300	_
Total	€3500	€3700

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The total fiscal UK costs of managing women with relapsed breast cancer – the strong economic case for adjuvant exemestane

R. Thomas<sup>1</sup>, M. Williams<sup>2</sup>, J. Glen<sup>3</sup>, M. Callam<sup>4</sup>. <sup>1</sup>Addenbrooke's Hospital, Department of Oncology, Cambridge, United Kingdom; <sup>2</sup>Bedford Hospital, Department of Oncology, Bedford, United Kingdom; <sup>3</sup>Cranfield University, School of Management – Economics, Cranfield, United Kingdom; <sup>4</sup>Bedford Hospital, Surgery, Bedford, United Kingdom

**Background:** Switching to aromasin<sup>®</sup> (E) from tamoxifen (T) at 2 years incurs an absolute reduction in the risk of relapse of 4.7% according to International Exemestane Study (IES). To find out whether this strategy is cost efficient, this randomised retrospective analysis measured the *total hospital and community cost* of managing a patient with relapsed breast cancer, then compared this to the extra cost of adjuvant exemestane.

Methods: Our Breast Unit Data Base identified 168 patients relapsing between March 2000 and 2005. The demographics, ER were recorded. Sealed envelope randomisation selected 77 of these for scrutiny. The costs were derived from hospital notes, computer records, pharmacy records, GP, district nurse and hospice records. Activity included; in and outpatient activity, oncology drugs, radiology, radiotherapy, serum investigations, GP, district nurse, hospice visits and any medical activity which was directly related to the management of their relapsed cancer. Data recording stopped at a predetermined date of 1/1/07 where 52 patients had died. Hospital, GP and district nurse activity costs were derived from the 2005 published DoH index tariffs. Radiotherapy cost were taken from the Reference Costs' National Average Unit Cost. Drug price tariffs referred to the British National Formulary.