

Eur J Cancer, Vol. 27, No. 6, p. 808, 1991.
 Printed in Great Britain
 0277-5379/91 \$3.00 + 0.00
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High Risk Breast Cancer in Young Women

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It is regrettable that the recent NJIH Consensus Statement ignored the value of age group in young women as a criterion of high risk in deciding on the use of adjuvant systemic therapy. Statistical studies in the last decade have consistently shown a correlation between poor survival rate and the clinical manifestation of breast cancer at age 35 or younger in node negative as well as in node positive cases [1-4].

A recent multifactorial analysis of various prognostic factors in 379 node negative breast cancer patients [5] showed three criteria to be associated with a lower recurrence-free survival rate—age group under 37, larger tumour size and anaplastic histological grading. Age under 37 was associated with the same degree of relative risk as anaplastic histology, and both were more important prognostically than was tumour size. The increased aggressiveness of the tumour in young women (cut-off age varying from 32-40) is confirmed also in several studies of operable breast cancer treated primarily by radiation therapy alone or in combination with tumourectomy. In the latest of these reports [6] the recurrence rate at 5 years in women aged under 40 was 34.2% compared with 15.3% in women aged over 40.

Confusion was caused by earlier reports in the literature of differences in the cut-off age selected for the "young women" category, and it is important to contrast the relatively poor prognosis in patients under 35 with the relatively good prognosis in the group nearing the menopause, whose chances of survival are better than that of any other age group (Table 1). Hormone depletion at the approach of the menopause not only prolongs the recurrence free period but also the mean survival after the first recurrence.

In an analysis of 31 594 women with breast cancer in Norway, Host and Lund [1] divided them into 5-year age groups and distinguished four distinct prognostic groups (under 34, 35-49, 50-74 and 75 years and more). Relative survival rates were found to be worst among patients aged 34 years or younger and best of all in the age group 35-49. This applied to node negative and node positive operable cases as well as to patients in stages 3 and 4. A similar division into 5 year age groups was carried out by Adami *et al.* [2] in 57 068 women with breast cancer at all stages in Sweden. At 5 years, the survival rate among patients under 35 was 13% lower than in the group aged 45-49, and the latter had the best prognosis of all age groups.

Further evidence of a better prognosis in the years immediately preceding the menopause is provided by Ries *et al.* [7] in a

Table 1. Comparative prognosis according to age group among young women with breast cancer

| Ref. | Worst prognosis* | Best prognosis* |
|------|------------------|-----------------|
| 1 | <34 | 35-49 |
| 2 | <35 | 45-49 |
| 3 | <30 | 36-39 |
| 4 | <30 | — |
| 5 | <37 | — |
| 6 | <40 | — |
| 7 | — | 45-54 |
| 8 | — | 49-54 |
| 9 | — | 40-49 |
| 10 | — | 45-49 |

*Years.

study of almost 47 000 cases where patients aged 45-54 showed a better survival rate than either older or younger women. Nemoto *et al.* [8] in a study of almost 17 000 cases reported a similar finding for the age group 49-54. Palmer *et al.* [9] in a study of 1022 cases found the best survival rate in the age group 40-49 while Boetani *et al.* [10] in a study of almost 13 000 cases found it in the age group 45-49. Taking all reports together, groupings that included women 45-49 had the best prognosis, and no other 5-year age group had a consistently better prognosis.

The evidence that women under 35 with breast cancer have the worst prognosis of all age groups while those aged 45-49 have the best should be used to assist in selecting both node negative and node positive cases for adjuvant systemic therapy.

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 Revised 1 Mar. 1991; accepted 6 Mar. 1991.