Chemotherapy and tamoxifen for breast cancer at 15 years*

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Patient group</th>
<th>Annual rate ratio for breast cancer mortality over 15 y</th>
<th>Absolute improvement in breast cancer mortality p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polychemotherapy for 4–6 months</td>
<td>Women &lt;50 y</td>
<td>0.62</td>
<td>4.7%</td>
</tr>
<tr>
<td>Ttamoxifen for 5 y</td>
<td>Women 50–60 y</td>
<td>0.80</td>
<td>2.6%</td>
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<tr>
<td></td>
<td>Women with ER positive</td>
<td>0.69</td>
<td>3.6%</td>
</tr>
<tr>
<td></td>
<td>disease (any age)</td>
<td></td>
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</tbody>
</table>

*ER = oestrogen receptor.

CONCLUSION

Adjuvant chemotherapy, tamoxifen, and ovarian ablation or suppression substantially reduce mortality rates over 15 years in women with early breast cancer.

Abstract and commentary also appear in ACP Journal Club.

Commentary

The EBCTCG update of previous work shows that the survival benefits of adjuvant therapy persist over time—the effect of killing or suppressing micrometastases lasts far beyond the end of treatment. In this case, the absolute benefit can be as high as 10 additional women alive per 100 treated, with no additional deaths from treatment related diseases.

These are the minimal effects of adjuvant therapy, too, because current treatments are more effective and less toxic. Recent large RCTs show that the addition of paclitaxel to 4 cycles of doxorubicin-cyclophosphamide adds another 2–3 survivors per 100 women.1 We can add 2–3 more survivors by giving the same chemotherapy every 2 weeks instead of every 3 weeks.2 The addition of trastuzumab (Herceptin) for women whose cancer over expresses human epidermal growth factor receptor-2 may provide even more benefit, based on its substantial effects on disease free survival.3 A low fat diet (about 30 g/d) may reduce relative recurrence risk a further 24% when added to these “best” therapies.4 Aromatase inhibitors improve disease free survival more than tamoxifen alone, or when given after tamoxifen, and will probably improve overall survival.5 How does one keep up with these developments? Adjuvant! (www.adjuvantonline.com) is a simple prediction tool to estimate the absolute benefits for women considering these treatments.

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