



Commentary

High-dose chemotherapy for breast cancer

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A recent editorial in the *New Engl J Med* relating to the clinical trial in Philadelphia concluded that high-dose chemotherapy and autologous bone marrow transplantation is ineffective in treating metastatic breast cancer and should be abandoned in favour of alternative experimental approaches.^{1,2} It signalled a culmination in the controversy on this topic and heralded a swift switch from scientific to political and economic discussions. Health care agencies and medical care providers may now be tempted to refuse reimbursement for such procedures on the basis of this statement. The transplant community is criticised for their neglect of economic issues. It would be preferable to present a more balanced picture. There are indeed solid arguments against such premature reactions.

In fact, the observation time in the Philadelphia study is short, the number of patients is small and extrapolation of results to patients transplanted in earlier stages of the disease is not justified. In addition, the study shows that one single course of high-dose intensification is as effective and equally toxic as a repetitive treatment over 24 months. Treatment of metastatic breast cancer remains a difficult challenge and easy alternatives are not just around the corner. Transplant strategies can be improved. It would be wrong to abandon this form of therapy at this timepoint.

In addition, the transplant community is responsive and does react, as is illustrated by the data from the annual activity survey of the European Group for Blood and Marrow Transplantation EBMT.³ The number of autologous hematopoietic stem cell transplants performed for breast cancer increased after the initial positive reports in 1992.⁴ The routine use of autologous stem cell transplantation has declined since 1997 (Figure 1) despite a continuing increase in transplants for other indications. In contrast, the numbers of active prospective randomized studies have increased and currently at least 15 prospective randomized studies on high-dose therapy in breast cancer, seven in the metastatic setting, are ongoing in Europe. These studies should be continued and the results awaited. Moreover, there must be room for carefully conducted prospective randomized studies to further improve this potentially powerful form of

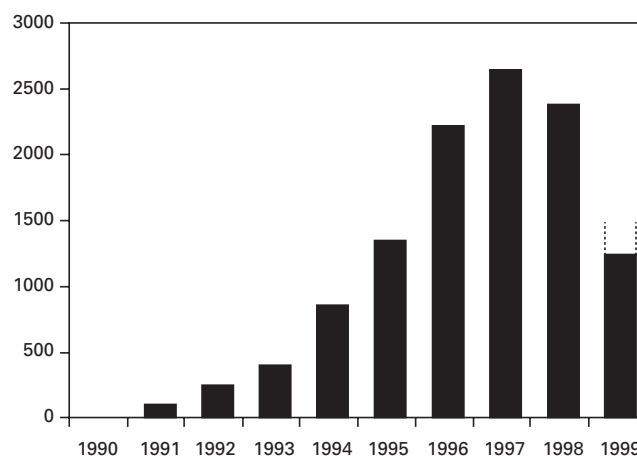


Figure 1 Numbers of autologous hematopoietic stem cell transplants performed in Europe for breast cancer according to the annual EBMT activity surveys. Dotted line indicates data based on preliminary data for 1999; approximately 85% of all teams have replied to date.

therapy. This is in line with a recent statement by the National Institutes of Health in the USA.⁵

References

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- 3 Gratwohl A, Passweg J, Baldomero H, Hermans J. Special report: Blood and marrow transplantation activity in Europe 1997. *Bone Marrow Transplant* 1999; **24**: 231–245.
- 4 Antman K, Ayash L, Elias A *et al.* A phase II study of high-dose cyclophosphamide, thiotepa, and carboplatin with autologous marrow support in women with measurable advanced breast cancer responding to standard-dose therapy. *J Clin Oncol* 1992; **10**: 102–110.
- 5 NIH News Release. Don't write off high-dose chemotherapy with bone marrow transplant for breast cancer, experts say. <http://www.nih.gov/news/pr/may2000/nci-19.htm>