

Introduction

This issue of *Breast Disease* is devoted entirely to the controversial topic of dose intensity for breast cancer. Over the past 15 years, there have been dozens of phase I and II clinical trials, motivated by pre-clinical evidence suggesting a potential therapeutic role for doses of chemotherapy sufficiently myelotoxic as to require the reinfusion of hematopoietic stem cells. Unfortunately, there is a paucity of data from prospective, randomized clinical trials to inform us adequately as to the role of this strategic approach to breast cancer treatment, whether for early stage or advanced disease. The objective of this special edition is to provide a timely and thorough overview of where we are in our understanding of the potential for and limitations of high dose chemotherapy for breast cancer, where we are headed, and perhaps, how we will get there.

In order to examine where to go from here, we must first look back at where we have been. Hennessy and Kennedy provide an overview of the European randomized trials of high dose chemotherapy, and presently ongoing trials are discussed as well. Stadtmauer and Strobl review the potential role for manipulation of the stem cell product in support of high dose chemotherapy. Hryniuk critically assesses the issue of dose intensity, dose density, and cumulative dose parameters, with reference to completed trials of high dose therapy. Miller and Sledge address the issue of patient selection bias, and its impact on the perception of benefit of high dose chemotherapy. To provide a more comprehensive overview of this field, Partridge, Bunnell and Winer examine quality of life issues pertaining to the administration of high dose chemotherapy for breast cancer.

Unfortunately, in the year 2001, we still lack the answers to many fundamental, and some subtler questions regarding the role for and potential optimization of high dose chemotherapy for this disease. In this issue, Elias examines the issue of double, or tandem transplants, the role of induction therapy, and the integration of new agents. Gress provides a futuristic look at post-transplant immunotherapy approaches that offer the possibility of eradicating residual micrometastatic disease. Norton thoughtfully examines kinetic modelling as it may impact on strategies and outcome of high dose therapy for early stage and metastatic breast cancer. Finally, Armstrong and Davidson offer a look at the future of this field — is this the “end of the beginning, or the beginning of the end”?

We recognize that we certainly could have included other topics related to this area of clinical and pre-clinical investigation; only time and mature data from ongoing research will tell how “on target” this issue is, with its chosen focus. We do hope that you will find the issue to be a timely, convenient, and informative update on this subject, and that it will foster discussion and debate regarding unresolved issues concerning dose intensity and breast cancer treatment. It is through such debate and the work that it motivates that we will be able to advance the care of patients faced with the diagnosis of breast cancer.

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