Taxotere®/Cytoxan® Superior to Standard Adriamycin®/Cytoxan

As Adjuvant Therapy in Breast Cancer

Researchers from the U.S. Oncology Research in Houston reported that the chemotherapy combination Taxotere (docetaxel) plus Cytoxan (cyclophosphamide) provides superior results to the standard Adriamycin (doxorubicin)/ Cytoxan regimen as adjuvant therapy in breast cancer patients. These results were presented at the 28th annual San Antonio Breast Cancer Symposium held December, 8-11,

Adriamycin/Cytoxan (AC) has long been considered a standard adjuvant chemotherapy combination for the treatment of breast cancer. Thirty years ago, results were published that established AC as the standard adjuvant treatment for breast cancer.

Since then, however, it has been noted that the anthracycline is associated with risks of cardiotoxicity, particularly in patients with underlying cardiac issues or the elderly. Furthermore, Taxotere has demonstrated greater anti-tumor activity than Adriamycin in women with advanced breast cancer. This prompted a trial by researchers affiliated with the U.S. Oncology Research, Inc. in Houston to directly compare AC to Taxotere/Cytoxan (TC) as adjuvant treatment in breast cancer.

This trial included 1016 women with stages I, II or operable stage III breast cancer who had complete surgical excision of their cancer to be randomized to one of the following arms: AC (60/600 mg/m2) or TC (75/600 mg/m2) administered every 3 weeks. Chemotherapy was administered prior to radiation therapy, and tamoxifen was administered following chemotherapy in hormone-positive patients. Patients were randomized between 1997 and 1999. Nearly half of the patients (48%) were node-negative, 41% had 1-3 positive nodes, and 11% had 4 or more positive nodes. At 5 year follow-up, women treated with TC had improved outcomes compared to those treated with AC:

- Disease-free survival at 5 years was 86% for those treated with TC, compared with 80% for those treated with AC (p=0.015)
- Overall survival at 5 years was 90% for those treated with TC, compared with 87% for those treated with AC (did not reach statistical significance)
- In general, TC was better tolerated than AC; patients treated with TC had greater neutropenia while those treated with AC had greater nausea and vomiting
- Node-positive women had a statistically significant improvement in disease-free survival when treated with TC than AC (HR=.67), however, the improvement in disease-free survival in node-negative women with TC did not reach statistical significance (HR=0.73)
- Both estrogen receptor positive, and estrogen receptor negative patients achieved similar benefit

The researchers concluded that TC improves disease-free survival compared with AC for the treatment of adjuvant breast cancer. Although cardiac side effects were not presented, the researcher noted that TC does not appear to have the cardiotoxicity issues associated with AC, which is a very important issue for some patients. The presenter stated that TC may now become a legitimate standard treatment option for adjuvant breast cancer.

Reference: Jones S, Savin M, Holmes F, et al. Final analysis: TC (docetaxel/cyclophosphamide, 4 cycles) has a superior disease-free survival compared to standard AC (doxorubicin/cyclophosphamide) in 1016 women with early breast cancer. Proceedings from the 28th San Antonio Breast Cancer Symposium. San Antonio, Texas. December 2005. Abstract #40