

High-dose Chemotherapy and Autologous Stem-cell Transplantation Does Not Improve Survival in Metastatic Breast Cancer

Researchers led by Dr. Michael Crump evaluated progression-free and overall survival seen in women with metastatic breast cancer who received one course of high-dose consolidation chemotherapy and autologous stem-cell transplantation versus standard-dose chemotherapy. Quality of life was also evaluated with each therapy. It was found that high-dose chemotherapy and transplantation did not confer improved progression-free or overall survival as compared to standard-dose chemotherapy. The trial, published in the January 1 *Journal of Clinical Oncology*, enrolled 386 women (median age, 47 years) who had received no prior chemotherapy for metastatic disease; 32% had estrogen and progesterone receptor–negative breast cancer, 42% had visceral metastases, and 58% had bone metastases. Of these patients, 224 responded and were assigned to receive high-dose cyclophosphamide, mitoxantrone, and carboplatin chemotherapy or standard therapy. After a median follow-up of 48 months, 79 and 77 deaths were observed in the high-dose chemotherapy and transplant and standard-therapy arms, respectively. In the high-dose chemotherapy and transplant arm, 7 patients (6%) died due to toxicity. The median overall survival was 24 months among those patients who received high-dose induction chemotherapy and autologous transplantation (95% confidence interval [CI], 21–35 months) as compared to 28 months among patients who received standard-dose chemotherapy (95% CI, 22–33 months); progression-free survival was 11 and 9 months, respectively. The rates of grade 3 and 4 toxicities were significantly lower in the standard-therapy arm. The authors remarked, “We could not identify any subgroup that derived greater benefit with high-dose chemotherapy.”

Panitumumab Extends Survival in Patients With Colorectal Cancer Who Have Failed Chemotherapy

At the 2008 American Society of Clinical Oncology Gastrointestinal Cancers Symposium, data were presented suggesting that the efficacy of single-agent panitumumab (Vectibix, Amgen), a monoclonal antibody that targets the epidermal growth factor receptor (EGFR), is confined to patients who have failed prior chemotherapeutic regimens and have nonmutated (wild-type) *KRAS* tumors. Wild-type *KRAS* is found in approximately 40% of colorectal tumors. Among these patients, panitumumab plus best supportive care increased progression-free survival in comparison to best supportive care alone. The median progression-free survival in patients with wild-type *KRAS* tumors was 12.3 weeks for those who received the antibody as compared to 7.3 weeks for those who received

best supportive care alone. This finding was considered useful for generating hypotheses on treatment strategies incorporating biomarkers to improve treatment outcomes in patients with colorectal cancer. In patients with tumors harboring a mutated or activated *KRAS*, the *KRAS* protein is always activated whether EGFR has been activated or therapeutically inhibited. Thus, in patients with mutated *KRAS*, signaling continues despite anti-EGFR therapy with agent like panitumumab.

Even Small Copay Decreases Rate of Screening for Breast Cancer

A survey of over 366,000 women between 65 and 69 years of age showed that requiring a copayment decreased the rates of regular mammography undertaken from 2001 to 2004. In comparison to those who had access to free mammograms, screening rates were nearly 11% lower for women whose copay was as low as \$12 (typical cost is \$20). Because breast cancer is more difficult to treat, and more expensive, routine mammograms are considered effective at saving lives and money. Therefore, lead author of the article in the January 24 issue of the *New England Journal of Medicine* Dr. Amal Trivedi noted, “It would make clinical sense, and probably economic sense, for a health plan to eliminate a co-payment for a mammogram.” The researchers also found that the rates of mammography were approximately 4% lower in areas with economically poor or poorly educated residents if women were required to pay part of the cost of the screening. In addition, the researchers noted that the number of women required to make a copay for mammography has increased since 2001 from 1 in 200 to 1 in 9. Those whose health-insurance plans suddenly required a copayment had a 5.5% decline in screening rates during the period of the study, whereas women whose plans covered the full cost had a 3.4% increase. Women from 174 Medicare managed-care plans in 38 states were included in the study.

In Brief

High-dose methotrexate alone or in combination leads to complete response in many patients with primary central nervous system lymphoma. Twelve of 25 patients achieved a complete response, and 5 patients are disease-free after a median follow-up of 6.8 years. (*Neurology*. 2008;70:401-402.)

Renal function can be maintained for years without immunosuppressive therapy following a combination of kidney and hematopoietic stem-cell transplantation from living donors, according to two reports. (*N Engl J Med*. 2008;358:353-361, 362-368.)