

Zometa May Have Direct Effect on Breast Tumors

BY MELISSA WEBER

Adding Zometa (zoledronic acid) to chemotherapy before surgery led breast tumors to shrink by an additional third, according to a subset analysis of the AZURE trial. This is the first patient-related direct evidence that Zometa, a bisphosphonate drug used to treat cancer-related bone loss, has an anti-tumor effect, said study investigator Robert Coleman, MD, of the University of Sheffield in the United Kingdom.

The primary purpose of the phase III AZURE trial, which enrolled 3,360 women with stage 2 and 3 breast cancer, is to determine if Zometa combined with standard treatment before and after surgery improves the time patients are free of their disease. While data on disease-free survival are still forthcoming, the early analysis released at a poster session at SABCs on Saturday looked at Zometa's impact on the tumor in 205 patients who received chemotherapy with or without Zometa before surgery.

A 33 percent difference in tumor size was reported between patients receiving Zometa plus chemotherapy and the patients receiving chemotherapy alone. The difference remained significant even after adjusting for prognostic variables, such as hormone receptor status and treatment duration.

Of the 104 patients receiving chemotherapy alone, 5.8 percent had no evidence of disease compared with 10.9 percent of 101 patients receiving the combination. In addition, fewer patients in the combination arm required mastectomy (65.3 percent) than in the chemotherapy arm (77.9 percent).

Earlier this year, *CURE* reported results on a similar [phase III study](#) from the annual meeting of the American Society of Clinical Oncology. In research led by Michael Gnant, MD, of the Medical University of Vienna, Zometa reduced the relative risk of recurrence by 35 percent after five years of follow-up in patients who received ovarian suppression and hormonal therapy following their surgery. (Follow-up for the AZURE trial is also five years.)

An important difference between the two studies is that Gnant's research was done in the context of hormonal therapy after surgery, and the current research looked at Zometa's effect with chemotherapy given prior to surgery. Plus, the benefits observed in the earlier trial were related to the bone microenvironment (creating a hostile environment for cancer cells to grow), whereas the AZURE analysis showed Zometa has a direct tumor effect on tumor shrinkage, Coleman said at a press briefing.

“Chemotherapy sensitizes the tumor to the effects of Zometa,” Coleman told reporters. “You get this exquisite synergy with Zometa given that you give it after chemotherapy.” Final results of the AZURE trial are expected in two to three years, according to a press statement from Novartis, maker of Zometa.

Read more of *CURE's* coverage of the 31st annual San Antonio Breast Cancer Symposium at <http://media.curetoday.com/html/emails/sabcs>.