CHEMOTHERAPY

Anastrozole superiority to tamoxifen for early breast cancer confirmed

Early results of the Arimidex, Tamoxifen, Alone or in Combination (ATAC) trial showed that anastrozole has a superior efficacy and fewer adverse effects compared with tamoxifen. Now, Jack Cuzick and colleagues report the long-term outcomes in a 10-year analysis of the ATAC trial.

Initially, the ATAC trial was designed to compare the outcomes of anastrozole and tamoxifen, either alone or in combination, as adjuvant treatment for postmenopausal women with early-stage breast cancer. “Anastrozole showed promise in metastatic breast cancer, so we decided to try it in the adjuvant setting,” explains Cuzick. The combination treatment offered no additional benefit and was discontinued; as such, the 10-year update only reports results for the monotherapy groups.

Patients were treated with either 1 mg of anastrozole ($n=3,125$) or 20 mg of tamoxifen ($n=3,116$), both administered orally, each day for 5 years. In the

extended analysis, median follow-up was 120 months, with a total of 48,472 woman-years of follow-up.

The previously reported efficacy and tolerability profiles were confirmed in this study. “Benefits of anastrozole over tamoxifen extend out to 10 years and the side-effect profile is still favorable,” Cuzick comments. Substantial improvements in disease-free survival, time to recurrence and time to distant recurrence were observed in the anastrozole group compared with the tamoxifen group. The absolute reduction of recurrence in the anastrozole group was 2.7% at 5 years and 4.3% at 10 years. These results suggest that deaths after recurrence may be reduced in patients treated with anastrozole compared with tamoxifen, although the researchers note that further follow-up is needed to confirm this finding.

During treatment, the incidence of serious adverse events was lower in the anastrozole group, but these events were

similar in both groups after treatment completion. Of note, although the bone fracture rate was higher in the anastrozole group during treatment, no difference was observed in the post-treatment follow-up period. The researchers will continue follow-up for at least another 5 years to monitor any late benefits and potential adverse effects, especially the development of other cancers, Cuzick concludes.

Lisa Richards

Original article Cuzick, J. *et al.* Effect of anastrozole and tamoxifen as adjuvant treatment for early-stage breast cancer: 10-year analysis of the ATAC trial. *Lancet Oncol.* **11**, 1135–1141 (2010)