Switching early breast cancer patients to exemestane improves long-term survival

September 21 2009

New research has found that switching post-menopausal women with early breast cancer to the drug exemestane (Aromasin) after two or three years of tamoxifen rather than keeping them on tamoxifen for five years improves the chance of remaining cancer free and reduces the risk of death for at least the next six years.

"These findings have confirmed that the strategy of switching to exemestane mid-way through the five-year tamoxifen treatment plan provides a clear and durable benefit for relapse and overall survival," the study's leader, Professor Charles Coombes, head of oncology at Imperial College in London, told Europe's largest cancer congress, ECCO 15 - ESMO 34, in Berlin today (Tuesday 22 September). "We found that six years after changing treatment, women who got exemestane were 18% more likely to remain disease free and were 14% less likely to die than those who stayed on tamoxifen."

Breast cancer is the leading cancer in women, with 1.29 million cases diagnosed worldwide every year. About 75% of breast cancers are oestrogen-receptor positive, meaning that oestrogen plays in important role in promoting the growth. Such tumours are usually treated with anti-oestrogen drugs. Tamoxifen, the oldest of these, blocks the tumour's ability to use oestrogen and is the standard treatment after surgery in women who have early-stage breast cancer. It is normally taken for five years. Exemestane belongs to a newer class of anti-oestrogen drugs known as aromatase inhibitors, which interfere with the function of aromatase, an enzyme responsible for the production of oestrogen.

Aromatase inhibitors are accepted as an alternative to tamoxifen for post-menopausal women, but the question of how best to use these drugs remains under investigation.

The study tested whether switching to exemestane after two or three years of tamoxifen was more effective in the long term than continuing with tamoxifen for the remainder of the five years of treatment. The results presented in Berlin update findings reported previously, providing evidence based on a longer follow-up to produce a more robust estimate of the strategy's effect on survival and disease recurrence and give a clearer picture of the long-term side effects.

"Our earlier analysis, based on a shorter follow-up, had shown a clear relapse advantage but until now, the magnitude and duration of the overall survival benefit had been uncertain. These updated results show that the relapse improvement does not seem to diminish over time and have clarified that the survival advantage is robust and enduring."

The study, which has the longest follow-up of any trial to date investigating the impact of switching from tamoxifen to an aromatase inhibitor, involved 4,724 postmenopausal women from 37 countries with oestrogen-receptor-positive or unknown receptor status breast cancer who had their tumours cut out and had remained disease free after two or three years on tamoxifen. About half continued with tamoxifen until they had completed a total of five years of treatment, while the other half were switched to exemestane for the remaining period of treatment. The women were followed for an average of 91 months.

The 18% improvement in disease-free survival is derived from a hazard ratio of 0.82, while the 14% improvement in overall survival is calculated from a hazard ratio of 0.86.

"Practice changed in many countries after our early findings were

released in 2004, from using five years of tamoxifen to the current recommended treatment strategy of switching these patients to exemestane or another aromatase inhibitor after two or three years of tamoxifen. The issue that has yet to be clarified is whether starting with tamoxifen and then switching is better than starting with an aromatase inhibitor," Prof Coombes said.

Cancer Research UK and Pfizer Ltd., which makes exemestane, funded the study.

Source: ECCO-the European CanCer Organisation