

Conference Report

Report on Sydney Breast Cancer Trials Symposium: prevention issues*

Prevention was not a major theme for the symposium, but a number of lectures alluded to it, and it was featured in some of the discussions. Much of the interest focused on the use of aromatase inhibitors (AIs) in prevention, reflecting the Australia–New Zealand (ANZ) and International Breast Cancer Study Groups' (IBCSG) involvement in the International Breast Cancer Intervention Study II (IBIS-II). One highlight was Jim Engles' review paper on the use of AIs in the adjuvant setting. Studying the incidence of isolated contralateral tumours in this situation provides an excellent model for the potential of an agent to prevent new tumours in high-risk women without breast cancer.

Three major trials have reported outcomes in the area in three different circumstances using three different AIs. The Arimidex, Tamoxifen, Alone or in Combination (ATAC) trial has compared anastrozole with tamoxifen as initial adjuvant treatment, the International Exemestane Study (IES) has compared exemestane with tamoxifen after 2 years of tamoxifen and the MA-17 trial has evaluated letrozole vs. placebo after 5 years of tamoxifen. The impact of these different AIs on new contralateral tumours was surprisingly similar across these trials, indicating a constant rate of new tumours with follow-up time, and a constant effectiveness resulting in a 40–50% reduction in incidence. Given the 50% reduction in new oestrogen receptor (ER)-positive tumour achieved by tamoxifen, this suggests that AIs may reduce the incidence of new ER-positive tumours by 70–80%, although no impact on ER-negative tumours is anticipated.

Ian Campbell reviewed new trials for ductal carcinoma in situ (DCIS), including the British Association of Surgical Oncology (BASO) DCIS-II

trial of radiotherapy and the IBIS-II DCIS stratum, looking at hormonal treatment.

This last study aims to evaluate the role of endocrine therapy on ER-positive DCIS, and recognizes that both local control and the prevention of new tumours are important for these women. They have a rate of new contralateral tumours similar to women with invasive disease (about 6/1000 per year) and are at 3–4 times the risk of new cancers as an average woman. IBIS-II (DCIS) aims to randomize 4000 post-menopausal women with ER-positive DCIS treated by local excision and having clear margins between anastrozole and tamoxifen. Treatment will be for 5 years. This trial parallels the IBIS-II prevention stratum, which will randomize 6000 high-risk post-menopausal women between anastrozole and placebo.

Jack Cuzick discussed the risk factors for breast cancer and demonstrated the IBIS-risk evaluator. This is a computer program, which synthesizes information about the major known risk factors for breast cancer, family history, reproductive/hormonal factors and benign breast disease. It provides 10-year and lifetime risks for breast cancer and compares these to an 'average' woman of the same age. Probabilities for having BRCA1 or BRCA2 mutations are also estimated. The talk also discussed the potentially very large role of mammographic density for identifying risk. On a population basis it predicts more of the risk for breast cancer than family history, and he suggested that screening programs could provide an additional service by advising women about risk if they more routinely reported density and had resources to collect information on other risk factors. This would be very helpful for recruiting into prevention trials, and may, in the long term, be more useful than the early detection service currently provided.

J. Cuzick

*John Snow Professor of Epidemiology
Cancer Research UK
Centre for Epidemiology, Mathematics and
Statistics
Wolfson Institute of Preventive Medicine
Charterhouse Square
London, UK*

Correspondence to: Jack Cuzick, John Snow Professor of Epidemiology, Cancer Research UK, Centre for Epidemiology, Mathematics and Statistics, Wolfson Institute of Preventive Medicine, Charterhouse Square, London, EC1M 6BQ, UK; Tel: +44 (0)20 7882 6196; Fax: +44 (0)20 7882 6552

*The Sydney Breast Cancer Trials Symposium took place from 14 to 17 July 2004 in Sydney, Australia.

Publication date 29/09/04
BCO/302/2004/CR