Chemoprevention of breast cancer: a literature review and report on the current status in Germany

The prevention of breast cancer is increasingly of focus in health-politics policies and has gained a valid position in the area of medical intervention. Data from a current meta-analysis of all four randomised Tamoxifen prevention studies illustrate a reduction of 38 % (Odds ratio 0.62; 95 % CI 0.42-0.89) in the incidence of breast cancer. This observation lead to registration of this drug in the USA for the prevention of breast cancer in women with a calculated 5-year risk of > 1.66 %. In addition to Tamoxifen, further substances are currently being tested with the aim of improving the therapeutic index whilst reducing incidence and mortality rates. These are primarily substances which have proven efficacy in the treatment of breast cancer (other antioestrogens, aromatase inhibitors and GnRH-analogues) or those whose mechanism of action predict a preventative effect (retinoids, phytooestrogens, substitution preparations e. g. Tibolone). In Germany, chemoprevention is currently only to be recommended within study protocols, as to date no substance is approved in the indication 'prevention of breast cancer'. A essential contribution to the accrual of valid data is the conduct of breast cancer prevention trials. The participation of women with high risk of breast cancer in Germany is, in contrast to comparable international
studies, problematic. Data on the current knowledge and attitude of the female population towards such trials (gathered via a questionnaire of the DACH in 7,000 women) show that only 19.5% of the women questioned during a consultation with a gynaecologist were aware of the possibility of active chemoprevention. However, 55.3% stated that they would be prepared to take such a substance, were chemoprevention possible. Studies for both pre- and post-menopausal women with increased risk of breast cancer are currently active in Germany (GISS and IBIS-II of the study group GABG - German Adjuvant Breast cancer Group). An intensive information campaign to raise public awareness of breast cancer risk amongst women and their physicians is planned in conjunction with the IBIS-II study (www.brustkrebsvorbeugen.de). Latest literature recommendations for prevention of breast cancer (Chlebowski et al.) have been assessed.