Breast Cancer Campaign today called for better measures to help support women to take tamoxifen for the full five years as prescribed, following research that shows failure to do so increases the risk of breast cancer recurrence and early death and comes at a huge economic cost to the NHS.

Breast Cancer Campaign researchers undertook an economic evaluation of adherence to tamoxifen and the costs associated with low adherence. They revealed that, on average, the equivalent of an additional £6,000 is spent on other medications and hospitalisation for each patient with poor adherence. Encouraging women to take their full course of tamoxifen could save 500 lives every year and bring substantive benefit to NHS budgets potentially freeing up nearly £30 million per year across the UK, the equivalent of 20 radiotherapy machines (linacs).

Dr Colin McCowan (University of Glasgow with colleagues at the University of Dundee) examined prescription records for 1263 women to calculate how closely they had followed the one a day pill regime and for how long, over the full five year treatment duration. If women had collected less than 80% of their prescription they were classed as having low adherence to their treatment.

They also looked at quality of life and calculated the costs of additional treatments. While the study confirmed Dr McCowan’s earlier findings* that patients with low adherence have increased risk of recurrence and are more likely to die from their breast cancer, it also showed increased medical costs and the loss of an average of 13 months of reasonable quality of life.**

Around 40,000 women in the UK each year are diagnosed with hormone-positive breast cancer and around 13,000 will be prescribed a five year course of tamoxifen, usually after
surgery, radiotherapy and any necessary chemotherapy. Based on today’s findings in the *British Journal of Cancer* more than 5,000 of these women may fail to complete the full course of treatment and this low adherence comes at a considerable cost to the patient, worse outcomes, in some cases early death, poorer quality of life and an increased cost to the NHS.

Dr McCowan said, “High adherence to tamoxifen would seem to benefit both the patient and the NHS. We want to raise awareness among healthcare professionals that this is a real issue and that women need help and the correct advice to ensure they have the best possible chance of living beyond breast cancer.

“We do know that side effects of this treatment are an issue and we are currently analysing interviews with women to investigate reasons why they do or don’t take their medication and other issues around adherence. We hope to use these findings to develop interventions to help women and the NHS to get the most from the life-saving drugs that we already have.”

Baroness Delyth Morgan, Chief Executive of Breast Cancer Campaign said, “Tamoxifen is one of the most effective treatments for breast cancer when taken as prescribed but sadly some women find it intolerable to take the full five year course and risk recurrence of their disease.

“This study is a timely reminder that it’s so important that women are given support to continue taking their tamoxifen so that they have the best possible chance to outlive breast cancer.”

Women who are concerned about their treatment should speak to their health care team, or phone Breast Cancer Care’s helpline on 0808 800 6000.

**Quality of Life is a measure used by the National Institute of Health and Care Excellence (NICE) when evaluating how much the NHS should be willing to pay for a drug or intervention. This study showed women with low adherence lost an average of 13 months of reasonable quality of life or 1.1 Quality-adjusted life year (QALY).**