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# Supervised exercise for older women treated for breast cancer.

## Results from a pilot randomised controlled trial.

**Kipling, K.N.[1*], McCluskey, S.[1], Boduszek, D.[1] Kirshbaum, M.N.[2] and Garbutt, G.[1,3] (2015).**

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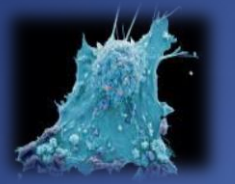


### Introduction

Breast cancer is now the most common cancer in the UK. Almost two-thirds of women diagnosed earlier this decade with breast cancer are now likely to survive their disease for at least twenty years.

### Exercise and breast cancer research

There is compelling evidence of the benefits of exercise in younger cancer survivors and older populations, however, evidence from older breast cancer survivors, is limited, despite the higher incidence of diagnosis and lower survival rates in this population.

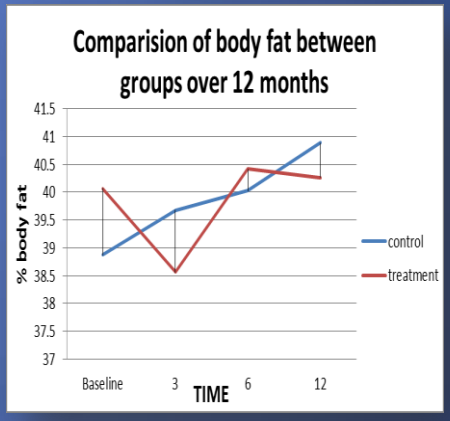
### Aims

To investigate whether a 12-week supervised exercise intervention with older women (>60 years) during adjuvant therapy for breast cancer, improved function (12-min walk), body composition (air displacement plesythmography), quality of life (European Organisation for the Research and Treatment of Cancer) and physical activity (PA) levels (Scottish PA Questionnaire) and if these could be sustained over a 12-month period.

### Methods

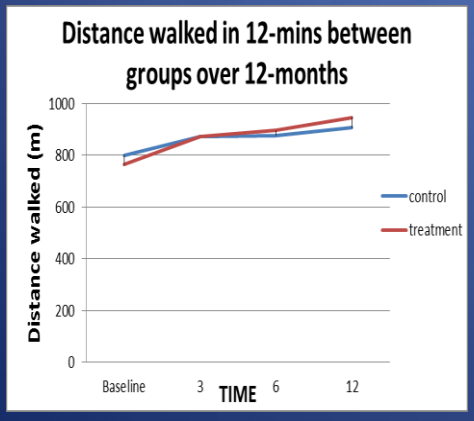
A pilot randomised controlled trial

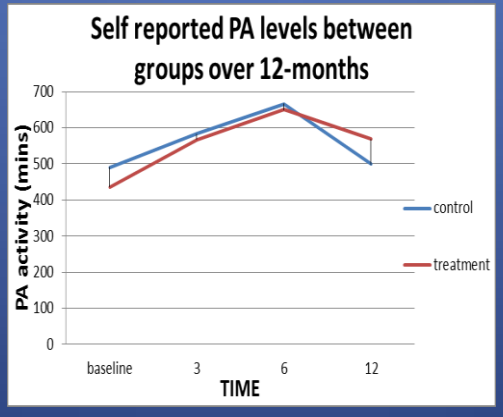
35 female breast cancer patients were recruited (mean = 67 years; SD ± 5.02) Supervised exercise intervention (n=16) or a control group (n=19). The exercise programme consisted of both aerobic and resistance exercises at RPE 3-4. Outcomes measures were assessed at baseline, 3, 6 and 12 months. Statistical analyses were conducted using descriptive statistics, mixed between-within ANOVA and repeated measures ANOVA.

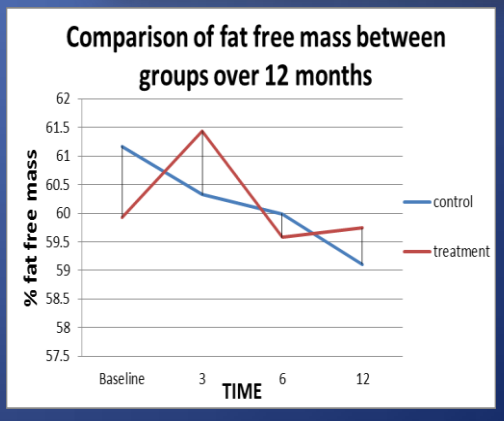



### Results

Attrition rates to the study were good (12.5%-intervention, 26%-control, 20%-overall) with no adverse events reported. Adherence to the supervised exercise sessions was high (>85%). Although no statistically significant interaction terms were detected between groups for any outcome measures at all four time points, both intervention and control groups significantly increased walking distance ($P < 0.01$, ES = .78) and physical activity levels ($P < 0.05$, ES = .30) over 12 months. Positive trends in favour of the intervention group was observed for body composition during the intervention period.




### Summary and Conclusions

Recruitment onto a supervised exercise intervention with older breast cancer survivors (BCS) was feasible with high adherence rates without adverse events. Future studies should incorporate larger sample sizes and consider longer interventions to evaluate sustained positive health benefits and behavioural change . This is important with BCS now living much longer to further examine the effects of physical activity in this under researched population.