

<https://doi.org/10.29289/259453942024V34S1083>

# Evaluation of quality of life of women breast cancer survivors who received resistance training for 12 months

Jessika Teodoro Santos<sup>1</sup>, Naiany Pereira Silva<sup>1,2</sup>, Rizia Rocha Silva<sup>1,2</sup>, Vitor Alves Marques<sup>1,2</sup>, Rafael Ribeiro Alves<sup>1,2</sup>, Nathan Muci Aguiar Damasio<sup>2</sup>, Carlos Alexandre Vieira<sup>1,2</sup>

<sup>1</sup>Universidade Federal de Goiás, College of Physical Education and Dance.

<sup>2</sup>Universidade Federal de Goiás, Postgraduate Program in Health Sciences.

**Objective:** The study aimed to assess the impact of a 12-month resistance training (RT) protocol on the quality of life (QoL) of woman breast cancer (BC) survivors. **Methodology:** This is an experimental study, lasting 12 months and involving 10 women (58.80±6.94 years) BC survivors. QoL was evaluated using the FACT B+4 (Functional Assessment of Cancer Therapy – BC + Arm Subscale) composed of the domains: physical well-being (PWB), social/family well-being (SWB), well-being emotional (EWB), functional well-being (FWB), BC specific aspects (BCS), Trial Outcomes Index (TOI), FACT-B, and FACT-G. To analyze the two dependent measurements (pre- and post-intervention), we used the paired student t-test (parametric data) described as mean and standard error (SE) and the Wilcoxon test (non-parametric) described as median and SE. **Results:** For QoL, there was a significant difference for SWB with an improvement of 6.10 (SE 2.11) points ( $t(9)=2.883$ ,  $p=0.018$ ;  $d=1.14$  “large”) and FWB improvement of 7.60 (SE 2.77) points ( $t(9)=2.736$ ,  $p=0.023$ ;  $d=0.86$  “large”). As for TOI, FACT-G, and FACT-B, there was a significant increase post-training, with gains of 13.60 (SE 4.02), 17.10 (SE 5.07), and 21.90 (SE 6.31) points, respectively, with significant differences for TOI ( $t(9)=3.376$ ,  $p=0.008$ ;  $d=1.06$  “large”), FACT-G ( $t(9)=3.372$ ,  $p=0.009$ ;  $d=1.06$  “large”), and FACT-B ( $t(9)=3.468$ ,  $p=0.007$ ;  $d=1.09$  “large”). The Wilcoxon test indicated an improvement in BCS after the intervention, with a median of 4.00 (SE 2.14) points ( $W=3.500$ ,  $p=0.027$ ,  $rB=0.84$  “large”). **Conclusion:** RT after 12 months of intervention is significantly beneficial in improving the QoL of women BC survivors.

**Keywords:** resistance training; quality of life; breast cancer; chemotherapy.