powered by

dkfz.
GERMAN
CANCER RESEARCH CENTER
IN THE HELMHOLTZ ASSOCIATION

Contribution ID: **122** Type: **1 - Scientific Poster**

Preliminary Results of a Pragmatic Randomized Controlled Trial Testing a Cancer-Specific Exercise Mobile App in Breast Cancer Survivors

Thursday 23 July 2026 14:25 (20 minutes)

Purpose: Exercise is an evidence-based, effective therapy for breast cancer survivors, relieving treatment side effects (e.g., fatigue, depression), improving quality of life, and possibly extending survival. Geographical barriers create disparities in access to cancer exercise programs. For many breast cancer survivors, accessing an in-person exercise program is a logistical challenge due to traveling, cost, and time. To make the benefits of exercise more accessible, on-demand services such as mobile health (mHealth) are promising solutions. This study aimed to determine the effectiveness of a cancer-specific exercise mobile application (app) compared to usual care to increase exercise in breast cancer survivors.

Methods: Stage I-III breast cancer survivors were randomly assigned to either the mobile app, offering a personalized exercise prescription based on individual fatigue levels, or the usual care group. The primary outcome was moderate-to-vigorous exercise (MVE) minutes per week, measured using the Godin Leisure-Time Exercise Questionnaire. Assessments were conducted at baseline and 12 weeks. Analysis of covariance was conducted for MVE, adjusting for baseline outcome value, age, location, stage, time since diagnosis, and surgery type.

Results: A total of 132 women were assigned to either the app (n=66) or the usual care (n=66) group. To date, 52 participants have completed the 12-week assessment. Most participants lived in an urban area (66.2%), and the mean age was 61.2 years (SD=9.7). From baseline to 12 weeks, MVE increased by 60 min/week in the app group compared to 46 min/week in the control group (adjusted between-group difference, 20 min/week; 95% CI: -60 to 99; p=0.61). Data collection will be completed in February 2026. Final results, including wearable exercise data, will be presented at the conference.

Conclusion: By targeting underserved breast cancer populations, this study addresses critical gaps in access to supportive care by evaluating a cancer-specific exercise app that delivers accessible, evidence-based support remotely.

Keywords

mHealth, Accessibility, Remote Exercise Intervention, Digital Technology

Conflict of Interest & Ethical Approval

yes

Abstract submitters declaration

yes

Authors: FILION, Myriam (Faculty of Kinesiology, Sport, and Recreation, College of Health Sciences, University of Alberta, Edmonton, AB, Canada); Dr MCNEELLY, Margaret L. (Department of Physical Therapy/ Department of Oncology University of Alberta & Cancer Care Alberta, Edmonton, AB, Canada); Dr PHILLIPS, Siobhan M. (Department of Preventive Medicine, Northwestern University, Feinberg School of Medicine, Chicago, IL, U.S.A); Dr SCHWARTZ, Anna L. (Coleman Health LLC, Parks, AZ, U.S.A); COURNEYA, Kerry S. (Faculty of Kinesiology, Sport, and Recreation, College of Health Sciences, University of Alberta, Edmonton, AB, Canada)

Presenter: FILION, Myriam (Faculty of Kinesiology, Sport, and Recreation, College of Health Sciences, University of Alberta, Edmonton, AB, Canada)

Session Classification: Poster Session