powered by

dkfz.
GERMAN
CANCER RESEARCH CENTER
IN THE HELMHOLTZ ASSOCIATION

Contribution ID: **287** Type: **1 - Scientific Poster**

Beneficial effects of exercise on breast cancer patients undergoing aromatase inhibitors: Scoping Review

Wednesday 22 July 2026 12:55 (20 minutes)

Background: Hormone receptor-positive breast cancer patients receiving aromatase inhibitor (AI) therapy commonly experience adverse effects such as joint pain, fatigue, and reduced quality of life. These symptoms can affect treatment adherence and survivorship. Given the growing number of breast cancer survivors, understanding supportive care strategies such as exercise is critical for improving long-term outcomes. Exercise is a promising non-pharmacological approach, but its effectiveness in managing AI-related side effects remains unclear.
Methods: This scoping review was conducted in accordance with the PRISMA-ScR guidelines. A systematic search of two electronic databases (PubMed and EMBASE) was performed using predefined keywords. Relevant data were extracted using EndNote and charted in a structured Excel spreadsheet. The findings were summarized narratively.
Results: Fifteen studies involving 596 breast cancer patients receiving aromatase inhibitor therapy were included. Aerobic and resistance training were the most commonly employed interventions, demonstrating benefits such as reduced arthralgia, improved physical function, enhanced quality of life, and better sleep. Some studies also reported favorable changes in body composition and cardiovascular fitness. Pelvic floor muscle training effectively reduced urinary incontinence. Overall, exercise interventions were safe, feasible, and showed good adherence.
Conclusion: Exercise appears to be a safe and effective strategy to reduce aromatase inhibitor related side effects and improve quality of life in breast cancer survivors. Individualized exercise programs are recommended to enhance feasibility and adherence.

Implications for Cancer Survivors: Future research should focus on diverse populations and long-term outcomes to inform the development of accessible and sustainable exercise interventions for breast cancer survivors experiencing aromatase inhibitor-related side effects.

Keywords: scoping review, breast cancer, aromatase inhibitors, exercise
Preferred type of presentation: Poster presentation
Declaration of interest: The authors declare no conflicts of interest.
Funding: None.
*Corresponding author: Justin Y. Jeon, E-mail: jjeon@yonsei.ac.kr

Keywords

Keywords: scoping review, breast cancer, aromatase inhibitors, exercise

Conflict of Interest & Ethical Approval

yes

Abstract submitters declaration

yes

Author: MOON, Jinyoung (Graduate Program in Sports Applied Industry, Yonsei University, Seoul, Republic of Korea)

Co-authors: Mr LEE, Donghoon (Department of Sport Industry Studies, Yonsei University, Seoul, Republic of Korea); JEON, Justin Y. (Yonsei University)

Presenter: MOON, Jinyoung (Graduate Program in Sports Applied Industry, Yonsei University, Seoul, Republic of Korea)

Session Classification: Poster Session