



PREFERABLE

**Exercise is found to help patients
with metastatic breast cancer
in the PREFERABLE Study**

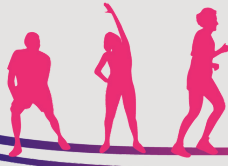


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 825677



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About



PREFERABLE

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he PREFERABLE project, in which EUROPA DONNA – The European Breast Cancer Coalition is a partner, took place from January 2019 through June 2024. This 5 ½ year project included **two studies**. The **EFFECT study** investigated whether a 9-month exercise programme, supervised by an exercise trainer, could improve fatigue and quality of life (QoL) of people with breast cancer that has spread to other parts of the body (metastatic breast cancer (MBC)). The **PERSPECTIVE study** focused on patients' views on exercising after a diagnosis of MBC.

People with MBC usually undergo continuous treatment. Thanks to this, they often live longer, but many also report a deteriorating quality of life over time. Supportive care strategies, like exercise, are therefore needed to make patients' lives better.



The findings of the PREFERABLE-EFFECT study provide **strong evidence** that **patients with MBC should be offered exercise as part of their package of treatment and care** if it is considered safe given their particular health status.



The **PREFERABLE-EFFECT** study



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his study included 357 people with MBC who were recruited at one of eight centres in Germany, Poland, Spain, Sweden, the Netherlands and Australia. Of these people, 178 were randomly selected to take part in a nine-month exercise programme alongside their usual care (exercise group). The other 179 people were given their usual care (control group). On average, participants were 55 years of age, the majority were receiving first- or second-line treatment, and their metastases were mainly located in the bones (74%).

The exercise programme consisted of twice weekly personalised training sessions with resistance, aerobic and balance exercises. These sessions were overseen by a physiotherapist or exercise specialist.

Most participants only missed a few training sessions, which suggests that the training programme was manageable for them. Participants in both the control group and the exercise group were encouraged to be physically active for at least 30 minutes every day and were given activity trackers.

At the start of the study and after three, six, and nine months, researchers asked study participants about their levels of fatigue and their quality of life, including any pain they were suffering.



The results: EFFECT study

Compared to the control group, the participants in the exercise group:



Experienced significantly less fatigue



Reported a significantly better quality of life

The EFFECT results also indicate that patients participating in exercise:



Experienced less pain



Reported better social functioning, i.e., better functioning at work and when with family and friends



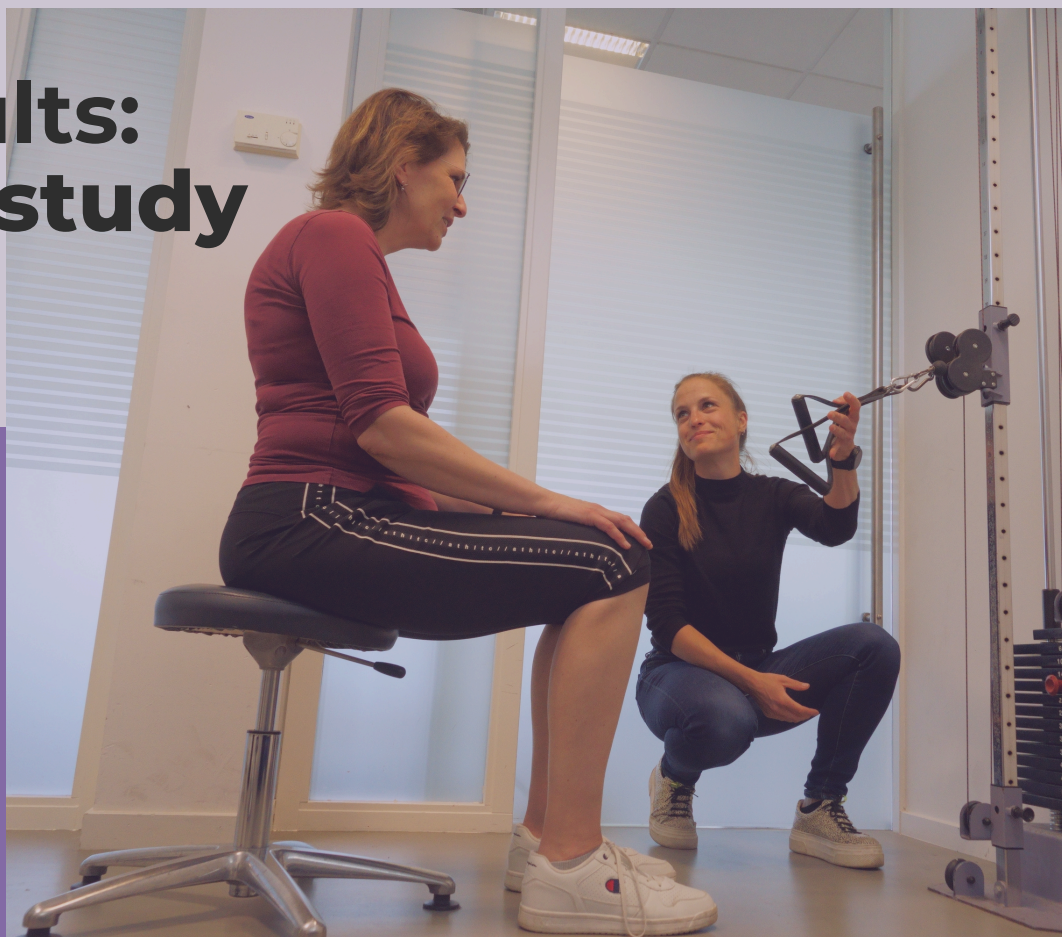
Reported less shortness of breath



Had better physical fitness



Had better sexual functioning



Patients at all ages benefitted from exercise, but the greater improvements among patients aged under 50 indicate that more tailoring might be needed for older adults to have the same benefit. Researchers also saw greater improvements among those suffering from pain at the beginning of the study.

The study also looked at how exercise affects healthcare use in people with MBC: it showed that the EFFECT exercise program led to lower total (healthcare and societal) costs, including cost reductions due to significantly less short-term sick leave. These cost reductions, along with the beneficial effects, suggest that supervised exercise programmes are likely to be cost-effective for MBC patients. Exercising in a group is less costly than exercising alone.

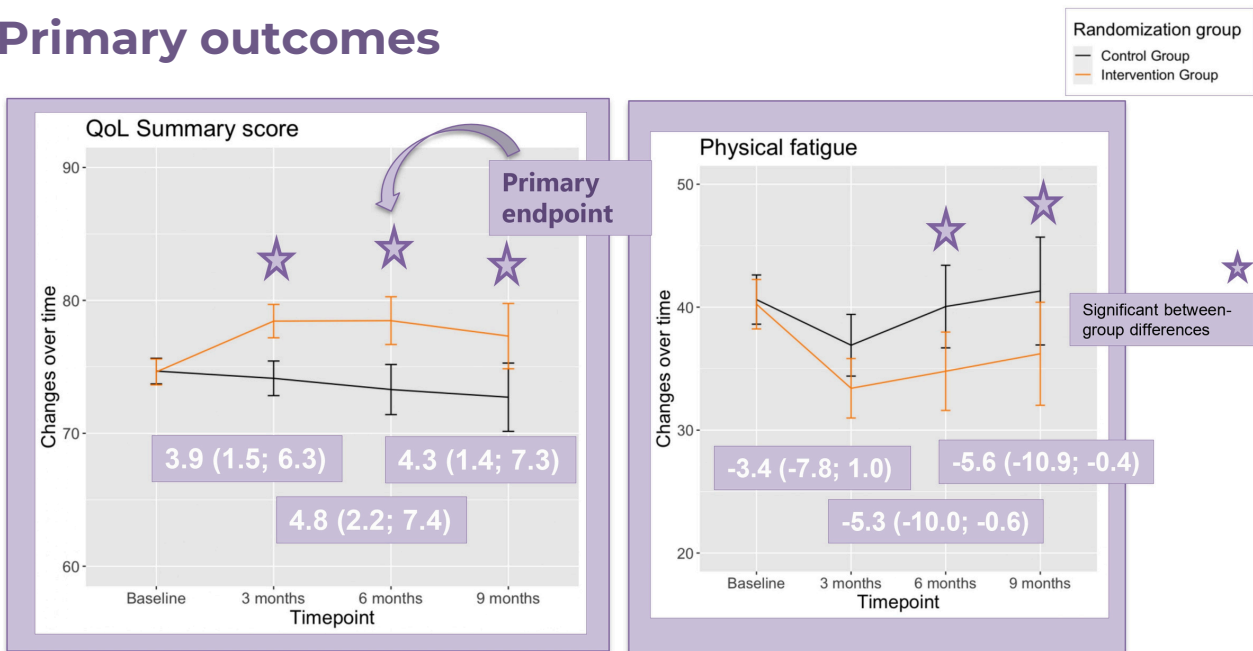
A detailed description of the design of the EFFECT study can be found here:

<https://pubmed.ncbi.nlm.nih.gov/35906659/>



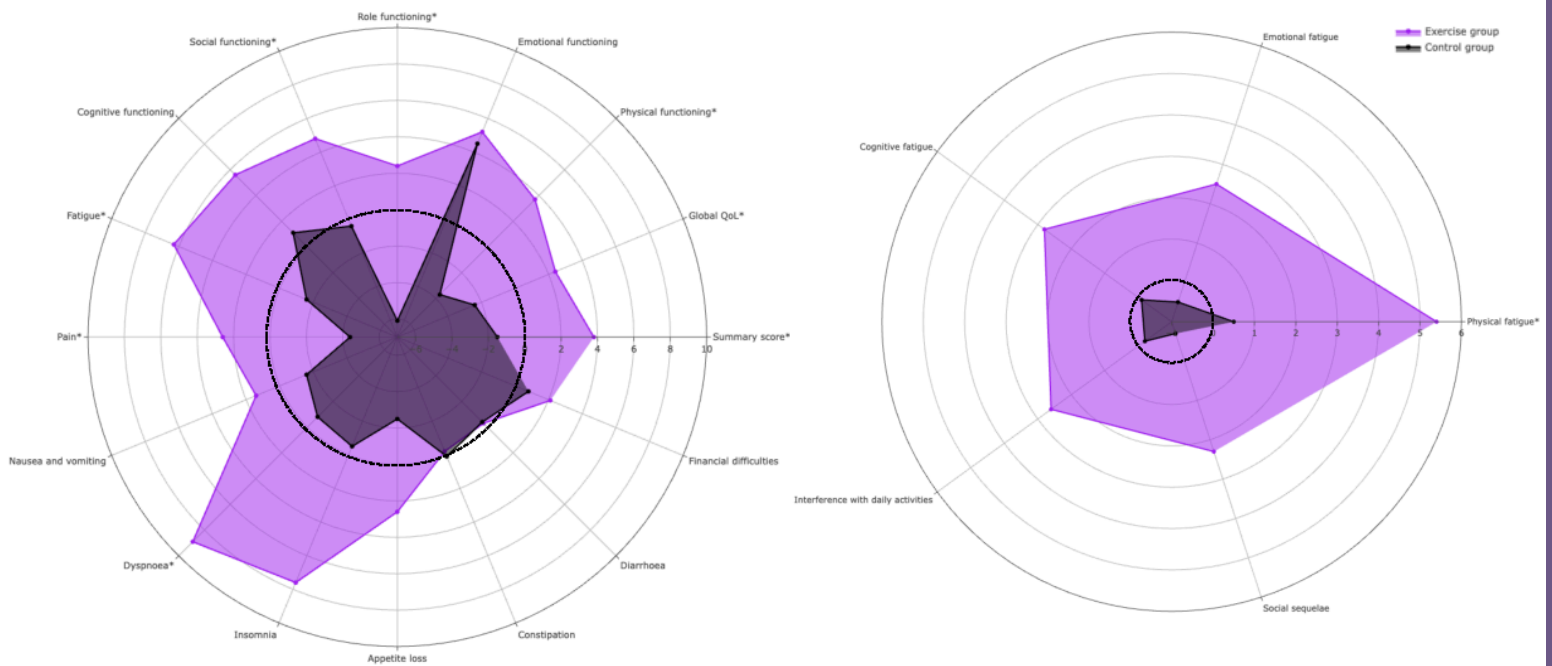
Results at a glance

Primary outcomes



Changes in QoL summary score and physical fatigue over time in both the exercise and control group (i.e., within-group differences). For both figures: a star indicates a statistically significant between-group difference.

Overall outcomes



Radar plots demonstrating changes from baseline to 6 months post baseline in quality of life and fatigue scores for participants randomized to the exercise and control group. It should be noted that the scale of all QoL-symptom outcomes and fatigue outcomes were inverted to facilitate interpretability. An increase from baseline to 6 months post-baseline now indicates an improvement for all outcomes. Everything outside the dashed circle means an improvement in QoL-symptom or fatigue outcomes. An asterisk indicates a statistically significant between-group difference.

The PERSPECTIVE study

In the PREFERABLE-PERSPECTIVE study, patients' perspectives on exercising after a diagnosis of MBC were investigated using focus-groups and questionnaires. A total of 44 people with MBC from four European countries were interviewed in focus groups with the aim to get insight into perceived barriers, facilitators, and preferences for supervised exercise programmes.

They preferred group exercise that facilitated social interaction, but also expressed a need for individualized exercise programmes. This suggests the importance of developing flexible exercise programmes tailored to individual needs. In addition, questionnaires were completed by 420 people with MBC from 13 centres in five European countries. These questionnaires assessed patients':

- Knowledge about exercise
- Expectations about the effects of exercise
- Perceived barriers to and facilitators of exercising
- Preferences for content and type of exercise

The majority of the respondents reported not having the necessary skills to participate in regular exercise as recommended by current exercise guidelines for people with cancer. Patients preferred personalized advice and training facilities where they can practice safe and effective exercises. When implementing exercise interventions for MBC patients, attention should be given to how much patients are willing to pay and to the availability of cost reimbursement via insurance or other means.

These results were used to develop specific recommendations for policy makers, healthcare managers, clinical exercise professionals and non-governmental organizations (NGOs), that can be found here: <https://www.h2020preferable.eu/publications/>



What do the **PREFERABLE** Project results mean for People with **MBC**?

The results of this project are good news for people with metastatic breast cancer. It shows that they can experience a better quality of life with less fatigue, pain and other disease symptoms and treatment side-effects if they take part in a supervised exercise programme as part of their treatment. Although people with MBC cannot currently be cured of their disease, they can live for many months or years, so ensuring they have the best possible quality of life is vital.

Based on these research findings, supervised exercise for patients with MBC – particularly those who are experiencing pain – is recommended as part of their standard care. Note that in the PREFERABLE-EFFECT study only patients with stable bone metastases were included.*



If you are a person living with MBC:

Please talk to your medical team first and search for an exercise trainer or physiotherapist who is trained in working with cancer patients and can develop a personalised plan tailored to your needs and health status. A detailed description of the exercise programme used in the PREFERABLE-EFFECT study can be found here: <https://www.h2020preferable.eu/exercise-program/>

*If you have unstable bone metastases (ask your doctor whether this is the case), then consult with your medical team before you start a supervised exercise programme like the EFFECT programme. A risk assessment is necessary to determine the likelihood of skeletal complications, which should be communicated with the exercise trainer. It would be best if the programme is supervised by a physical therapist or clinical exercise physiologist who has training and experience in cancer and exercise. More information on exercise for patients with bone metastases can be found here: <https://cancerexercise.med.ubc.ca/bmehub/>



If you are a patient advocate

Patient advocates and NGOs should educate people with MBC and other relevant stakeholders about expected health benefits from exercise, which include significantly reduced fatigue, pain and dyspnea increased quality-of-life, including social and role functioning.

Patient advocates and NGOs should provide people who have MBC with practical recommendations on how to get started with a supervised exercise programme and help motivate them to keep up with it despite barriers.

Patient advocates and NGOs should advocate for exercise to be integrated into MBC treatment plans. They should lobby public officials in their countries to provide reimbursement for supervised exercise programmes for people with MBC.

Patient advocates and NGOs should ensure that medical professionals in their countries are aware of the results of the PREFERABLE project and lobby them to include supervised exercise as part of their treatment and care.

If the possibility for reimbursement for the costs of an exercise programme are currently not realistic, patient groups can consider fundraising to help pay for supervised exercise programmes for MBC patients.

For more information, see the PREFERABLE Website: <https://www.h2020preferable.eu>





EUROPA DONNA – The European Breast Cancer Coalition – is an independent, non-profit organisation whose members are affiliated groups from countries throughout Europe. **EUROPA DONNA** works to raise public awareness of breast cancer and to mobilise the support of European women in pressing for improved breast cancer education, appropriate screening, optimal treatment and care and increased funding for research. Member countries currently number 47.





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