

Author	Conclusion of the work	Search question	Conclusion of the app with RCT filter
1	To prevent post-breast cancer surgery lymphedema, focus on shoulder and elbow exercises. Aerobic exercise addresses pain and muscle weakness. Optimal shoulder joint mobility is achieved through a combination of aerobic and specific exercises. Tailored intervention is crucial based on postoperative complications. This review emphasizes the need for standardized exercise programs, given variations in methods and timing among researchers.	What are the effective rehabilitation exercises for different complications of breast cancer patients after surgery?	These studies suggest that personalized rehabilitation exercises, physical activity, ROM and strengthening exercises, Tai Ji, aerobic exercise, Pilates, yoga, directed physiotherapy, and two-stage physical rehabilitation can improve upper limb function, shoulder mobility, immune function, and quality of life, while reducing complications such as lymphedema, pain, and fatigue in breast cancer patients after surgery.
2	Current randomized controlled trials regarding effects of exercise interventions on palliative outcomes for advanced cancer patients show great variability. While studies show promise, no generalizable conclusions can be made. Further research is needed.	What exercise interventions can be performed independently by patients with advanced stage cancer appropriate for palliative care services and the effects of these interventions on symptoms and quality of life?	These studies suggest that strength and endurance training, physiotherapy, and combined aerobic and resistance exercises can improve independence, reduce symptoms, and enhance quality of life in patients with advanced cancer receiving palliative care.
3	In summary, full-body physical exercise, mainly if composed of aerobic and resistance components, may help to mitigate some side effects commonly experienced by patients with head and neck cancers during anticancer therapies. Moreover, the present systematic review highlights the necessity to implement future studies with a solid design to investigate those underexplored areas, such as the prehabilitation one, and fully understand the role of exercise in supporting patients with head and neck cancer.	What the impact of full-body physical exercise on physical fitness and patients' reported outcomes, in patients with head and neck cancer, in the presurgical setting, during anticancer treatments, and after therapy conclusions?	These studies suggest that full-body exercise programs during and after cancer treatments can improve physical fitness, quality of life, and functional capacity in head and neck cancer patients, while also benefiting body composition, psychosocial wellbeing, and bone strength in some cases.

4 There is evidence that exercise may benefit the mental health of individuals with lung cancer, including improvements in depression symptoms and quality of life, based on the intervention studies reviewed here. Given the heterogeneity in findings, however, additional randomized controlled trials are needed to augment the existing evidence. Nevertheless, there appears to be sufficient evidence now for primary care physicians to recommend exercise for patients with lung cancer, while offering guidance on how to gradually and safely increase physical activity depending on the patient's health status.

These studies suggest that exercise interventions generally improve physical capacity, functional level, and patient-reported outcomes such as quality of life, anxiety, and depression in lung cancer patients, while one study found no significant improvements but noted deterioration in the control group.

5 The current evidence indicates that exercise does not significantly improve or reduce the immune system; thus, the prescription of exercise must not be discouraged due to the effects on the number and activity of immune system cells, but should be recommended due to the well-known benefits in quality of life, physical function or fatigue, and the absence of negative effects on the immune system.

What the effects of exercise on immune cells with tumor-specific activity in women with breast cancer? Can exercise significantly change the number or activity of these immune cells?

These studies suggest that exercise can have mixed effects on immune system cells in women with breast cancer, including improving natural killer (NK) cell number and lymphocytes, altering T-cell subtypes, and impacting inflammatory markers, while the intensity and type of exercise may also play a role.

6 The results of this review support that exercise is safe and feasible with evidence supporting improved QoL and symptom mitigation. Integration of exercise should be considered in the individualized management of advanced-stage lung cancer patients under the guidance of their healthcare providers.

What the effect of various exercise interventions on QoL, symptoms, and functional status in patients with advanced-stage lung cancer?

These studies suggest that various exercise interventions, including aerobic, strength, and endurance training, can improve physical performance, quality of life, and reduce symptoms in patients with advanced-stage lung cancer, while some studies show no significant improvements compared to control groups.

7

Aerobic exercise and resistance exercise were feasible in mitigating depressive symptoms in cancer patients. Further studies are needed to examine if exercise is psychologically beneficial for patients with specific types of cancer.

What the effect of aerobic exercise and/or resistance exercise in reducing depressive symptoms among cancer survivors relative to the controls?

These studies suggest that aerobic and resistance exercises can improve quality of life and decrease depression levels in cancer survivors, with varying effectiveness depending on factors such as exercise mode, baseline depressive symptoms, and cancer type.

8

All studies that reported improvements in waist circumference employed combined exercise and dietary interventions, with individualised aspects for the dietary components. Exercise and/or dietary interventions could potentially enhance quality of life and self-efficacy, and reduce waist circumference, in middle-aged and older women treated for cancer. Although findings are currently mixed, avenues for the development of interventions include ensuring there is a theoretical underpinning and incorporating more behaviour change techniques in exercise and/or dietary interventions in this population.

Exercise and/or dietary interventions scaffolded by behavior change theories and techniques, compared to usual care, are associated with improved QOL in middle- and older-aged women following cancer treatment?

These studies suggest that exercise and dietary interventions, supported by behavior change theories and techniques, are associated with improved quality of life in middle-aged and older women after cancer treatment.

Conclusion of the unfiltered app

These studies suggest that effective rehabilitation exercises for breast cancer patients after surgery include range of motion and strengthening exercises, personalized exercises, and alternative methods such as Tai Ji, aerobic exercises, magnetic therapy, Yoga, and early postoperative exercises, which improve shoulder mobility, limb strength, immune function, quality of life, and reduce complications.

These studies suggest that exercise interventions, such as multicomponent programs, resistance training, aerobic exercise, and nursing-led interventions, can improve quality of life, physical/cognitive functioning, and symptom management in patients with advanced stage cancer receiving palliative care.

These studies suggest that full-body physical exercise in patients with head and neck cancer can improve physical fitness, body composition, quality of life, and fatigue management, while also reducing symptom burden and anxiety.

Quais são os exercícios de reabilitação eficazes para diferentes complicações de pacientes com câncer de mama após a cirurgia?

Quais intervenções de exercícios podem ser realizadas de forma independente por pacientes com câncer em estágio avançado, apropriadas para serviços de cuidados paliativos e os efeitos dessas intervenções nos sintomas e na qualidade de vida?

Qual o impacto do exercício físico de corpo inteiro na aptidão física e nos resultados relatados pelos pacientes, em pacientes com câncer de cabeça e pescoço, no ambiente pré-cirúrgico, durante os tratamentos anticâncer e após as conclusões da terapia?

These studies suggest that exercise can lead to alterations in gene expression, immune cell activity, and cytokine expression in breast cancer patients, but the effects may vary depending on exercise intensity and type.

These studies suggest that various exercise interventions, including high-intensity training and supervised programs, generally improve fitness, physical function, and quality of life, while reducing fatigue and symptoms in patients with advanced-stage lung cancer, although some interventions may not show significant differences.

Quais os efeitos do exercício nas células do sistema imunológico com atividade específica do tumor em mulheres com câncer de mama? O exercício pode alterar significativamente o número ou a atividade dessas células imunológicas?

Qual o efeito de várias intervenções de exercícios na qualidade de vida, nos sintomas e no estado funcional em pacientes com câncer de pulmão em estágio avançado?

These studies suggest that aerobic exercise and combined aerobic plus resistance training can significantly reduce depressive symptoms among cancer survivors, particularly in breast cancer survivors, with additional benefits seen in quality of life, fatigue, and physical fitness.

These studies suggest that exercise and/or dietary interventions scaffolded by behavior change theories and techniques are associated with improved quality of life, fitness, and fatigue in middle- and older-aged women following cancer treatment.

Qual o efeito do exercício aeróbico e/ou do exercício resistido na redução dos sintomas depressivos entre os sobreviventes do câncer em relação aos controles?
O exercício e/ou intervenções dietéticas sustentadas por teorias e técnicas de mudança de comportamento, em comparação com os cuidados habituais, estão associados à melhoria da qualidade de vida em mulheres de meia-idade e mais velhas após o tratamento do cancro?