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**Qigong and the Treatment and Prevention of Cancer: A Bibliography
(Updated)**

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ABSTRACT

Qigong is a subfield of Traditional Chinese Medicine (TCM) that has been around for more than 4,000 years. It is also a subfield of health economics. Practicing qigong exercises on a regular basis can improve health and cause the body to function more efficiently. Numerous studies have shown that the regular practice of various qigong exercises can help in the treatment and even the prevention of certain diseases. This bibliography provides the citations to more than 30 years of medical studies that have been conducted on the use of qigong to treat and prevent cancer.

The bibliography is categorized by type of cancer, which makes it possible to find relevant studies on various types of cancer more easily. The present bibliography is part of a series on the economics of qigong, focusing on the healthcare benefits to be gained by the practice of qigong. Other studies in this series are listed at the end of this bibliography.

Key Words: cancer, qigong, chi gong, chi kung, health qigong, medical qigong, traditional Chinese medicine, TCM, tai chi, taiji chuan, 氣功, 气功, 氣功, 기공

JEL Codes: D60, I00, I10, I12, I19, Y50

METHODOLOGY

The PubMed.gov database was used to find studies on qigong and the prevention and treatment of cancer.

CANCER STUDIES

BIOSOCIALITY AND CANCER

Li, F., & Wang, C. (2020). "A Good Guy" Again: Biosociality in a Cancer Self-help Organization. *Medical anthropology*, 1–14. Advance online publication. <https://doi.org/10.1080/01459740.2020.1775219>

Tao WW, Jiang H, Tao XM, Jiang P, Sha LY, Sun XC. Effects of Acupuncture, Tuina, Tai Chi, Qigong, and Traditional Chinese Medicine Five-Element Music Therapy on Symptom Management and Quality of Life for Cancer Patients: A Meta-Analysis. *J Pain Symptom Manage*. 2016 Apr;51(4):728-747. doi: 10.1016/j.jpainsymman.2015.11.027. Epub 2016 Feb 12. PMID: 26880252.

BONE DENSITY

Fong, S., Choi, A., Luk, W. S., Yam, T., Leung, J., & Chung, J. (2018). Bone Mineral Density, Balance Performance, Balance Self-Efficacy, and Falls in Breast Cancer Survivors With and Without Qigong Training: An Observational Study. *Integrative cancer therapies*, 17(1), 124–130. <https://doi.org/10.1177/1534735416686687>

BREAST CANCER

- Chen Y, Zuo X, Tang Y, Zhou Z. The effects of Tai Chi and Baduanjin on breast cancer patients: systematic review and meta-analysis of randomized controlled trials. *Front Oncol.* 2024 Oct 28;14:1434087. doi: 10.3389/fonc.2024.1434087. PMID: 39529823; PMCID: PMC11551136.
- Chen, Z., Meng, Z., Milbury, K., Bei, W., Zhang, Y., Thornton, B., Liao, Z., Wei, Q., Chen, J., Guo, X., Liu, L., McQuade, J., Kirschbaum, C., & Cohen, L. (2013). Qigong improves quality of life in women undergoing radiotherapy for breast cancer: results of a randomized controlled trial. *Cancer, 119*(9), 1690–1698.
<https://doi.org/10.1002/cncr.27904>
- Chuang CW, Tsai MY, Wu SC, Liao WC. Chinese Medicines Treatment for Sleep Disturbance in Breast Cancer Survivors: A Network Meta-Analysis. *Integr Cancer Ther.* 2024 Jan-Dec;23:15347354241308857. doi: 10.1177/15347354241308857. PMID: 39704364; PMCID: PMC11662389.
- Cohen, L., Chen, Z., Arun, B., Shao, Z., Dryden, M., Xu, L., Le-Petross, C., Dogan, B., McKenna, B. J., Markman, M., & Babiera, G. (2010). External qigong therapy for women with breast cancer prior to surgery. *Integrative cancer therapies, 9*(4), 348–353.
<https://doi.org/10.1177/1534735410387424>
- Fong, S., Choi, A., Luk, W. S., Yam, T., Leung, J., & Chung, J. (2018). Bone Mineral Density, Balance Performance, Balance Self-Efficacy, and Falls in Breast Cancer Survivors With and Without Qigong Training: An Observational Study. *Integrative cancer therapies, 17*(1), 124–130. <https://doi.org/10.1177/1534735416686687>
- Fong, S. S., Ng, S. S., Luk, W. S., Chung, J. W., Ho, J. S., Ying, M., & Ma, A. W. (2014). Effects of qigong exercise on upper limb lymphedema and blood flow in survivors of breast cancer: a pilot study. *Integrative cancer therapies, 13*(1), 54–61.
<https://doi.org/10.1177/1534735413490797>
- Fong, S. S., Ng, S. S., Luk, W. S., Chung, J. W., Chung, L. M., Tsang, W. W., & Chow, L. P. (2013). Shoulder Mobility, Muscular Strength, and Quality of Life in Breast Cancer Survivors with and without Tai Chi Qigong Training. *Evidence-based complementary and alternative medicine : eCAM, 2013*, 787169. <https://doi.org/10.1155/2013/787169>
- Huang, S. M., Tseng, L. M., Chien, L. Y., Tai, C. J., Chen, P. H., Hung, C. T., & Hsiung, Y. (2016). Effects of non-sporting and sporting qigong on frailty and quality of life among breast cancer patients receiving chemotherapy. *European journal of oncology nursing : the official journal of European Oncology Nursing Society, 21*, 257–265.
<https://doi.org/10.1016/j.ejon.2015.10.012>

- Husebø, A., & Husebø, T. L. (2017). Quality of Life and Breast Cancer: How Can Mind-Body Exercise Therapies Help? An Overview Study. *Sports (Basel, Switzerland)*, 5(4), 79. <https://doi.org/10.3390/sports5040079>
- Kreutz, C., Schmidt, M. E., & Steindorf, K. (2019). Effects of physical and mind-body exercise on sleep problems during and after breast cancer treatment: a systematic review and meta-analysis. *Breast cancer research and treatment*, 176(1), 1–15. <https://doi.org/10.1007/s10549-019-05217-9>
- Kuo CC, Wang CC, Chang WL, Liao TC, Chen PE, Tung TH. Clinical Effects of Baduanjin Qigong Exercise on Cancer Patients: A Systematic Review and Meta-Analysis on Randomized Controlled Trials. *Evid Based Complement Alternat Med*. 2021 Apr 8;2021:6651238. doi: 10.1155/2021/6651238. PMID: 33880125; PMCID: PMC8049783.
- Larkey L, Huberty J, Pedersen M, Weihs K. Qigong/Tai Chi Easy for fatigue in breast cancer survivors: Rationale and design of a randomized clinical trial. *Contemp Clin Trials*. 2016;50:222-228. doi:10.1016/j.cct.2016.08.002
- Larkey, L. K., Roe, D. J., Smith, L., & Millstine, D. (2016). Exploratory outcome assessment of Qigong/Tai Chi Easy on breast cancer survivors. *Complementary therapies in medicine*, 29, 196–203. <https://doi.org/10.1016/j.ctim.2016.10.006>
- Larkey, L. K., Roe, D. J., Weihs, K. L., Jahnke, R., Lopez, A. M., Rogers, C. E., Oh, B., & Guillen-Rodriguez, J. (2015). Randomized controlled trial of Qigong/Tai Chi Easy on cancer-related fatigue in breast cancer survivors. *Annals of behavioral medicine : a publication of the Society of Behavioral Medicine*, 49(2), 165–176. <https://doi.org/10.1007/s12160-014-9645-4>
- Lee, T. I., Chen, H. H., & Yeh, M. L. (2006). Effects of chan-chuang qigong on improving symptom and psychological distress in chemotherapy patients. *The American journal of Chinese medicine*, 34(1), 37–46. <https://doi.org/10.1142/S0192415X06003618>
- Li C, Dong X, Yu L, Yuan K, Yi X, Shen Y, Niu H. The effects of qigong intervention based on the Internet on quality of life and physical fitness in Chinese postoperative breast cancer patients: a protocol of randomized controlled trial. *Trials*. 2023 Mar 13;24(1):186. doi: 10.1186/s13063-023-07187-2. PMID: 36915187; PMCID: PMC10010003.
- Li X, Wang X, Song L, Tian J, Ma X, Mao Q, Lin H, Zhang Y. Effects of Qigong, Tai Chi, acupuncture, and Tuina on cancer-related fatigue for breast cancer patients: A protocol of systematic review and meta-analysis. *Medicine (Baltimore)*. 2020 Nov 6;99(45):e23016. doi: 10.1097/MD.0000000000023016. PMID: 33157949; PMCID: PMC7647542.
- Liu, P., You, J., Loo, W., Sun, Y., He, Y., Sit, H., Jia, L., Wong, M., Xia, Z., Zheng, X., Wang, Z., Wang, N., Lao, L., & Chen, J. (2017). The efficacy of Guolin-Qigong on the body-mind health of Chinese women with breast cancer: a randomized controlled trial. *Quality*

of life research : an international journal of quality of life aspects of treatment, care and rehabilitation, 26(9), 2321–2331. <https://doi.org/10.1007/s11136-017-1576-7>

Liu, W., Schaffer, L., Herrs, N., Chollet, C., & Taylor, S. (2015). Improved sleep after Qigong exercise in breast cancer survivors: A pilot study. *Asia-Pacific journal of oncology nursing*, 2(4), 232–239. <https://doi.org/10.4103/2347-5625.170537>

Liu YC, Hung TT, Konara Mudiyansele SP, Wang CJ, Lin MF. Beneficial Exercises for Cancer-Related Fatigue among Women with Breast Cancer: A Systematic Review and Network Meta-Analysis. *Cancers (Basel)*. 2022 Dec 27;15(1):151. doi: 10.3390/cancers15010151. PMID: 36612147; PMCID: PMC9817866.

Matthews, E. E., Janssen, D. W., Djalilova, D. M., & Berger, A. M. (2018). Effects of Exercise on Sleep in Women with Breast Cancer: A Systematic Review. *Sleep medicine clinics*, 13(3), 395–417. <https://doi.org/10.1016/j.jsmc.2018.04.007>

McGee, Robert W. (2024). Tai Chi, Qigong and the Treatment of Breast Cancer, *Biomedical Journal of Scientific & Technical Research*,54(3), 46024-46027 (2024). DOI: 10.26717/BJSTR.2024.54.008566

Meng T, Hu SF, Cheng YQ, Ye MN, Wang B, Wu JJ, Chen HF. Qigong for women with breast cancer: An updated systematic review and meta-analysis. *Complement Ther Med*. 2021 Aug;60:102743. doi: 10.1016/j.ctim.2021.102743. Epub 2021 May 28. PMID: 34058368.

Myers, J. S., Mitchell, M., Krigel, S., Steinhoff, A., Boyce-White, A., Van Goethem, K., Valla, M., Dai, J., He, J., Liu, W., Sereika, S. M., & Bender, C. M. (2019). Qigong intervention for breast cancer survivors with complaints of decreased cognitive function. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*, 27(4), 1395–1403. <https://doi.org/10.1007/s00520-018-4430-8>

Osygiuk, K., Ligibel, J., Giobbie-Hurder, A., Vergara-Diaz, G., Bonato, P., Quinn, R., Ng, W., & Wayne, P. M. (2020). Qigong Mind-Body Exercise as a Biopsychosocial Therapy for Persistent Post-Surgical Pain in Breast Cancer: A Pilot Study. *Integrative cancer therapies*, 19, 1534735419893766. <https://doi.org/10.1177/1534735419893766>

Panchik, D., Masco, S., Zinnikas, P., Hillriegel, B., Lauder, T., Suttmann, E., Chinchilli, V., McBeth, M., & Hermann, W. (2019). Effect of Exercise on Breast Cancer-Related Lymphedema: What the Lymphatic Surgeon Needs to Know. *Journal of reconstructive microsurgery*, 35(1), 37–45. <https://doi.org/10.1055/s-0038-1660832>

Porter, D., Cochrane, S., & Zhu, X. (2017). Current Usage of Traditional Chinese Medicine for Breast Cancer-A Narrative Approach to the Experiences of Women with Breast Cancer in Australia-A Pilot Study. *Medicines (Basel, Switzerland)*, 4(2), 20. <https://doi.org/10.3390/medicines4020020>

- Quixadá AP, Miranda JGV, Osypiuk K, Bonato P, Vergara-Diaz G, Ligibel JA, Mehling W, Thompson ET, Wayne PM. Qigong Training Positively Impacts Both Posture and Mood in Breast Cancer Survivors With Persistent Post-surgical Pain: Support for an Embodied Cognition Paradigm. *Front Psychol.* 2022 Feb 21;13:800727. doi: 10.3389/fpsyg.2022.800727. PMID: 35265005; PMCID: PMC8900705.
- Rossi C, Maggiore C, Rossi MM, Filippone A, Guarino D, Di Micco A, Forcina L, Magno S. A Model of an Integrative Approach to Breast Cancer Patients. *Integr Cancer Ther.* 2021 Jan-Dec;20:15347354211040826. doi: 10.1177/15347354211040826. PMID: 34670415; PMCID: PMC8543635.
- Stan, D. L., Collins, N. M., Olsen, M. M., Croghan, I., & Pruthi, S. (2012). The evolution of mindfulness-based physical interventions in breast cancer survivors. *Evidence-based complementary and alternative medicine : eCAM*, 2012, 758641. <https://doi.org/10.1155/2012/758641>
- Wang CC, Geraghty S, Fox-Harding C, Wang C. Effects of a nurse-led Tai Chi programme on improving quality of life, mental wellbeing, and physical function of women with breast cancer: Protocol for a randomized controlled trial. *Womens Health (Lond).* 2022 Jan-Dec;18:17455057221127813. doi: 10.1177/17455057221127813. PMID: 36165224; PMCID: PMC9520183.
- Yan, X., Shen, H., Jiang, H., Hu, D., Zhang, C., Wang, J., & Wu, X. (2010). External Qi of Yan Xin Qigong Induces apoptosis and inhibits migration and invasion of estrogen-independent breast cancer cells through suppression of Akt/NF-kB signaling. *Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology*, 25(2-3), 263–270. <https://doi.org/10.1159/000276560>
- Yao LX, Zhou YB, Yuan YX, Li XF, Li XF. Network meta-analysis evaluating the impact of diverse exercise regimens on quality of life in women post-breast cancer surgery. *Medicine (Baltimore)*. 2024 Oct 18;103(42):e40009. doi: 10.1097/MD.00000000000040009. PMID: 39432638; PMCID: PMC11495728.
- Ye XX, Ren ZY, Vafaei S, Zhang JM, Song Y, Wang YX, Song PG. Effectiveness of Baduanjin Exercise on Quality of Life and Psychological Health in Postoperative Patients With Breast Cancer: A Systematic Review and Meta-analysis. *Integr Cancer Ther.* 2022 Jan-Dec;21:15347354221104092. doi: 10.1177/15347354221104092. PMID: 35699146; PMCID: PMC9202258.
- Yeh, M. L., Lee, T. I., Chen, H. H., & Chao, T. Y. (2006). The influences of Chan-Chuang qigong therapy on complete blood cell counts in breast cancer patients treated with chemotherapy. *Cancer nursing*, 29(2), 149–155. <https://doi.org/10.1097/00002820-200603000-00012>
- Ying, W., Min, Q. W., Lei, T., Na, Z. X., Li, L., & Jing, L. (2019). The health effects of Baduanjin exercise (a type of Qigong exercise) in breast cancer survivors: A randomized,

controlled, single-blinded trial. *European journal of oncology nursing : the official journal of European Oncology Nursing Society*, 39, 90–97.
<https://doi.org/10.1016/j.ejon.2019.01.007>

Zhang, Q., Gao, X., Liu, S., Yu, L., Zhu, J., & Qiu, S. (2020). Therapies for cognitive impairment in breast cancer survivors treated with chemotherapy: A protocol for systematic review. *Medicine*, 99(19), e20092.
<https://doi.org/10.1097/MD.00000000000020092>

CANCER IN MEN

Ford, C. G., Vowles, K. E., Smith, B. W., & Kinney, A. Y. (2020). Mindfulness and Meditative Movement Interventions for Men Living With Cancer: A Meta-analysis. *Annals of behavioral medicine : a publication of the Society of Behavioral Medicine*, 54(5), 360–373. <https://doi.org/10.1093/abm/kaz053>

COGNITIVE IMPAIRMENT AND CANCER

Bai L, Yu E. A narrative review of risk factors and interventions for cancer-related cognitive impairment. *Ann Transl Med*. 2021 Jan;9(1):72. doi: 10.21037/atm-20-6443. PMID: 33553365; PMCID: PMC7859819.

Campbell, K. L., Zdravec, K., Bland, K. A., Chesley, E., Wolf, F., & Janelins, M. C. (2020). The Effect of Exercise on Cancer-Related Cognitive Impairment and Applications for Physical Therapy: Systematic Review of Randomized Controlled Trials. *Physical therapy*, 100(3), 523–542. <https://doi.org/10.1093/ptj/pzz090>

Farahani MA, Soleimanpour S, Mayo SJ, Myers JS, Panesar P, Ameri F. The effect of mind-body exercise on cognitive function in cancer survivors: A systematic review. *Can Oncol Nurs J*. 2022 Feb 1;32(1):38-48. doi: 10.5737/236880763213848. PMID: 35280065; PMCID: PMC8849176.

Moon C, Wilson RL, Gonzalo-Encabo P, Kang DW, Mithani S, Dieli-Conwright CM, Patel DI. Measurement of Cognitive Function in Exercise Oncology Studies in Patients Treated With Chemotherapy: A Scoping Review. *Integr Cancer Ther*. 2024 Jan-Dec;23:15347354241265349. doi: 10.1177/15347354241265349. PMID: 39045709; PMCID: PMC11271141.

Myers, J. S., Mitchell, M., Krigel, S., Steinhoff, A., Boyce-White, A., Van Goethem, K., Valla, M., Dai, J., He, J., Liu, W., Sereika, S. M., & Bender, C. M. (2019). Qigong intervention for breast cancer survivors with complaints of decreased cognitive function. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*, 27(4), 1395–1403. <https://doi.org/10.1007/s00520-018-4430-8>

Oh, B., Butow, P. N., Mullan, B. A., Clarke, S. J., Beale, P. J., Pavlakis, N., Lee, M. S., Rosenthal, D. S., Larkey, L., & Vardy, J. (2012). Effect of medical Qigong on cognitive function, quality of life, and a biomarker of inflammation in cancer patients: a randomized controlled trial. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*, 20(6), 1235–1242. <https://doi.org/10.1007/s00520-011-1209-6>

Quixadá AP, Miranda JGV, Osypiuk K, Bonato P, Vergara-Diaz G, Ligibel JA, Mehling W, Thompson ET, Wayne PM. Qigong Training Positively Impacts Both Posture and Mood in Breast Cancer Survivors With Persistent Post-surgical Pain: Support for an Embodied Cognition Paradigm. *Front Psychol*. 2022 Feb 21;13:800727. doi: 10.3389/fpsyg.2022.800727. PMID: 35265005; PMCID: PMC8900705.

Zhang, Q., Gao, X., Liu, S., Yu, L., Zhu, J., & Qiu, S. (2020). Therapies for cognitive impairment in breast cancer survivors treated with chemotherapy: A protocol for systematic review. *Medicine*, 99(19), e20092. <https://doi.org/10.1097/MD.00000000000020092>

Zhang, Y., Luo, Y., & Zeng, Y. (2017). Meta-analysis of meditative/relaxation-based interventions for cognitive impairment in cancer patient. *International journal of nursing sciences*, 4(3), 322–327. <https://doi.org/10.1016/j.ijnss.2017.03.010>

COLORECTAL CANCER

Bailey LE, Morris MA. Mind-body therapies adjuvant to chemotherapy improve quality of life and fatigue in top cancers: A systematic review and meta-analysis. *Complement Ther Clin Pract*. 2024 Feb;54:101811. doi: 10.1016/j.ctcp.2023.101811. Epub 2023 Nov 24. PMID: 38029633.

Ho, R., Wan, A., Chan, J., Ng, S. M., Chung, K. F., & Chan, C. (2017). Study protocol on comparative effectiveness of mindfulness meditation and qigong on psychophysiological outcomes for patients with colorectal cancer: a randomized controlled trial. *BMC complementary and alternative medicine*, 17(1), 390. <https://doi.org/10.1186/s12906-017-1898-6>

Loh S. H. (1999). Qigong therapy in the treatment of metastatic colon cancer. *Alternative therapies in health and medicine*, 5(4), 112–111.

Lu, Y., Qu, H. Q., Chen, F. Y., Li, X. T., Cai, L., Chen, S., & Sun, Y. Y. (2019). Effect of Baduanjin Qigong Exercise on Cancer-Related Fatigue in Patients with Colorectal Cancer Undergoing Chemotherapy: A Randomized Controlled Trial. *Oncology research and treatment*, 42(9), 431–439. <https://doi.org/10.1159/000501127>

McGee, Robert W. (2024). Utilizing Tai Chi and Qigong to Treat Colon Cancer Survivors. *Biomedical Journal of Scientific & Technical Research*, 58(5), 51017-51025.

Yan, X., Shen, H., Jiang, H., Hu, D., Wang, J., & Wu, X. (2013). External Qi of Yan Xin Qigong inhibits activation of Akt, Erk1/2 and NF-κB and induces cell cycle arrest and apoptosis in colorectal cancer cells. *Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology*, 31(1), 113–122. <https://doi.org/10.1159/000343354>

DEPRESSION AND CANCER

Birling Y, Nevitt S, Bhuyan DJ, Jia M, Feng F, Carlson LE, Pham T, Liu J, Ayati Z, Nyiam L, Yu Z, Fahey P. Mind-Body Therapies for Cancer Patients Living with Depression, Anxiety or Insomnia (MIRACLE): A Systematic Review with Individual Participant Data Network Meta-Analysis. *Methods Protoc*. 2021 Oct 19;4(4):76. doi: 10.3390/mps4040076. PMID: 34698240; PMCID: PMC8544545.

Dy SM, Lorenz KA, Naeim A, Sanati H, Walling A, Asch SM. Evidence-based recommendations for cancer fatigue, anorexia, depression, and dyspnea. *J Clin Oncol*. 2008 Aug 10;26(23):3886-95. doi: 10.1200/JCO.2007.15.9525. PMID: 18688057.

Ford CG, Vowles KE, Smith BW, Kinney AY. Mindfulness and Meditative Movement Interventions for Men Living With Cancer: A Meta-analysis. *Ann Behav Med*. 2020 Apr 20;54(5):360-373. doi: 10.1093/abm/kaz053. PMID: 31773148; PMCID: PMC7168578.

Henshall, C. L., Allin, L., & Aveyard, H. (2019). A Systematic Review and Narrative Synthesis to Explore the Effectiveness of Exercise-Based Interventions in Improving Fatigue, Dyspnea, and Depression in Lung Cancer Survivors. *Cancer nursing*, 42(4), 295–306. <https://doi.org/10.1097/NCC.0000000000000605>

Neubert S, Schlecht S, Meng K, Rabe A, Jentschke E. Effects of a Video Sequence Based Intervention on Anxiety, Fatigue and Depression in Cancer Patients: Results of a Randomized Controlled Trial. *Integr Cancer Ther*. 2023 Jan-Dec;22:15347354231153172. doi: 10.1177/15347354231153172. PMID: 36799503; PMCID: PMC9940180.

Schlecht S, Neubert S, Meng K, Rabe A, Jentschke E. Changes of Symptoms of Anxiety, Depression, and Fatigue in Cancer Patients 3 Months after a Video-Based Intervention. *Int J Environ Res Public Health*. 2023 Oct 17;20(20):6933. doi: 10.3390/ijerph20206933. PMID: 37887671; PMCID: PMC10606592.

Ye XX, Ren ZY, Vafaei S, Zhang JM, Song Y, Wang YX, Song PG. Effectiveness of Baduanjin Exercise on Quality of Life and Psychological Health in Postoperative Patients With Breast Cancer: A Systematic Review and Meta-analysis. *Integr Cancer Ther*. 2022 Jan-Dec;21:15347354221104092. doi: 10.1177/15347354221104092. PMID: 35699146; PMCID: PMC9202258.

DYSYPNEA AND CANCER [Also see Lung Cancer]

Dy SM, Lorenz KA, Naeim A, Sanati H, Walling A, Asch SM. Evidence-based recommendations for cancer fatigue, anorexia, depression, and dyspnea. *J Clin Oncol*. 2008 Aug 10;26(23):3886-95. doi: 10.1200/JCO.2007.15.9525. PMID: 18688057.

Henshall, C. L., Allin, L., & Aveyard, H. (2019). A Systematic Review and Narrative Synthesis to Explore the Effectiveness of Exercise-Based Interventions in Improving Fatigue, Dyspnea, and Depression in Lung Cancer Survivors. *Cancer nursing*, 42(4), 295–306. <https://doi.org/10.1097/NCC.0000000000000605>

FALL PREVENTION AND CANCER

Fong, S., Choi, A., Luk, W. S., Yam, T., Leung, J., & Chung, J. (2018). Bone Mineral Density, Balance Performance, Balance Self-Efficacy, and Falls in Breast Cancer Survivors With and Without Qigong Training: An Observational Study. *Integrative cancer therapies*, 17(1), 124–130. <https://doi.org/10.1177/1534735416686687>

Fong, S. S., Chung, L. M., Tsang, W. W., Leung, J. C., Charm, C. Y., Luk, W. S., Chow, L. P., & Ng, S. S. (2014). Balance Performance in Irradiated Survivors of Nasopharyngeal Cancer with and without Tai Chi Qigong Training. *Evidence-based complementary and alternative medicine : eCAM*, 2014, 719437. <https://doi.org/10.1155/2014/719437>

Fulop, J. A., Grimone, A., & Victorson, D. (2017). Restoring Balance for People with Cancer Through Integrative Oncology. *Primary care*, 44(2), 323–335. <https://doi.org/10.1016/j.pop.2017.02.009>

FATIGUE AND CANCER

Arring, N. M., Barton, D. L., Brooks, T., & Zick, S. M. (2019). Integrative Therapies for Cancer-Related Fatigue. *Cancer journal (Sudbury, Mass.)*, 25(5), 349–356. <https://doi.org/10.1097/PPO.0000000000000396>

Bailey LE, Morris MA. Mind-body therapies adjuvant to chemotherapy improve quality of life and fatigue in top cancers: A systematic review and meta-analysis. *Complement Ther Clin Pract*. 2024 Feb;54:101811. doi: 10.1016/j.ctcp.2023.101811. Epub 2023 Nov 24. PMID: 38029633.

Busch A, Krause A, Rostock M. Komplementärmedizinische Therapieansätze bei krebsbedingter Fatigue [Complementary and integrative medicine in cancer-related fatigue]. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz*. 2024 Nov;67(11):1295-1305. German. doi: 10.1007/s00103-024-03957-8. Epub 2024 Oct 7. PMID: 39375219; PMCID: PMC11549166.

- Campo, R. A., Agarwal, N., LaStayo, P. C., O'Connor, K., Pappas, L., Boucher, K. M., Gardner, J., Smith, S., Light, K. C., & Kinney, A. Y. (2014). Levels of fatigue and distress in senior prostate cancer survivors enrolled in a 12-week randomized controlled trial of Qigong. *Journal of cancer survivorship : research and practice*, 8(1), 60–69. <https://doi.org/10.1007/s11764-013-0315-5>
- Dy SM, Lorenz KA, Naeim A, Sanati H, Walling A, Asch SM. Evidence-based recommendations for cancer fatigue, anorexia, depression, and dyspnea. *J Clin Oncol*. 2008 Aug 10;26(23):3886-95. doi: 10.1200/JCO.2007.15.9525. PMID: 18688057.
- Ee C, Kay S, Reynolds A, Lovato N, Lacey J, Koczwara B. Lifestyle and integrative oncology interventions for cancer-related fatigue and sleep disturbances. *Maturitas*. 2024 Sep;187:108056. doi: 10.1016/j.maturitas.2024.108056. Epub 2024 Jun 21. PMID: 38981156.
- Gowin K, Muminovic M, Zick SM, Lee RT, Lacchetti C, Mehta A. Integrative Therapies in Cancer Care: An Update on the Guidelines. *Am Soc Clin Oncol Educ Book*. 2024 Jun;44(3):e431554. doi: 10.1200/EDBK_431554. PMID: 38820485.
- Henshall, C. L., Allin, L., & Aveyard, H. (2019). A Systematic Review and Narrative Synthesis to Explore the Effectiveness of Exercise-Based Interventions in Improving Fatigue, Dyspnea, and Depression in Lung Cancer Survivors. *Cancer nursing*, 42(4), 295–306. <https://doi.org/10.1097/NCC.0000000000000605>
- Jiang L, Ouyang J, Du X. Effects of traditional Chinese medicine exercise therapy on cancer-related fatigue, anxiety and sleep quality in cancer patients: A protocol for systematic review and network meta-analysis. *Medicine (Baltimore)*. 2021 Nov 5;100(44):e27681. doi: 10.1097/MD.00000000000027681. PMID: 34871250; PMCID: PMC8568422.
- Kuo CC, Wang CC, Chang WL, Liao TC, Chen PE, Tung TH. Clinical Effects of Baduanjin Qigong Exercise on Cancer Patients: A Systematic Review and Meta-Analysis on Randomized Controlled Trials. *Evid Based Complement Alternat Med*. 2021 Apr 8;2021:6651238. doi: 10.1155/2021/6651238. PMID: 33880125; PMCID: PMC8049783.
- Larkey L, Huberty J, Pedersen M, Weihs K. Qigong/Tai Chi Easy for fatigue in breast cancer survivors: Rationale and design of a randomized clinical trial. *Contemp Clin Trials*. 2016;50:222-228. doi:10.1016/j.cct.2016.08.002
- Larkey, L. K., Roe, D. J., Weihs, K. L., Jahnke, R., Lopez, A. M., Rogers, C. E., Oh, B., & Guillen-Rodriguez, J. (2015). Randomized controlled trial of Qigong/Tai Chi Easy on cancer-related fatigue in breast cancer survivors. *Annals of behavioral medicine : a publication of the Society of Behavioral Medicine*, 49(2), 165–176. <https://doi.org/10.1007/s12160-014-9645-4>
- Lee, Y. H., Lai, G. M., Lee, D. C., Tsai Lai, L. J., & Chang, Y. P. (2018). Promoting Physical and Psychological Rehabilitation Activities and Evaluating Potential Links Among

Cancer-Related Fatigue, Fear of Recurrence, Quality of Life, and Physiological Indicators in Cancer Survivors. *Integrative cancer therapies*, 17(4), 1183–1194. <https://doi.org/10.1177/1534735418805149>

Li P, Wang Q, Liu L, Zhang Q, Zhou R, Wang Y, Liu T, Feng L. The Role of Complementary and Alternative Medicine on Cancer-Related Fatigue in Adults: An Overview of Systematic Reviews. *Integr Cancer Ther*. 2023 Jan-Dec;22:15347354231188947. doi: 10.1177/15347354231188947. PMID: 37515495; PMCID: PMC10387784.

Liu YC, Hung TT, Konara Mudiyansele SP, Wang CJ, Lin MF. Beneficial Exercises for Cancer-Related Fatigue among Women with Breast Cancer: A Systematic Review and Network Meta-Analysis. *Cancers (Basel)*. 2022 Dec 27;15(1):151. doi: 10.3390/cancers15010151. PMID: 36612147; PMCID: PMC9817866.

Low SLK, Ho GF, Liu B, Koh ES, Fei Y, Teo CS, Zhu X. Exploring Guolin Qigong (Mind-Body Exercise) for Improving Cancer Related Fatigue in Cancer Survivors: A Mixed Method Randomized Controlled Trial Protocol. *Integr Cancer Ther*. 2024 Jan-Dec;23:15347354241252698. doi: 10.1177/15347354241252698. PMID: 38757745; PMCID: PMC11102686.

Lu, Y., Qu, H. Q., Chen, F. Y., Li, X. T., Cai, L., Chen, S., & Sun, Y. Y. (2019). Effect of Baduanjin Qigong Exercise on Cancer-Related Fatigue in Patients with Colorectal Cancer Undergoing Chemotherapy: A Randomized Controlled Trial. *Oncology research and treatment*, 42(9), 431–439. <https://doi.org/10.1159/000501127>

Lee YH, Chang YP, Lee JT, Lee DC, Huang EY, Lai LT. Heart rate variability as an indicator of the beneficial effects of Qigong and mindfulness training on the mind-body well-being of cancer survivors. *Support Care Cancer*. 2022 Dec 19;31(1):59. doi: 10.1007/s00520-022-07476-7. PMID: 36534354; PMCID: PMC9761690.

McQuade, J. L., Prinsloo, S., Chang, D. Z., Spelman, A., Wei, Q., Basen-Engquist, K., Harrison, C., Zhang, Z., Kuban, D., Lee, A., & Cohen, L. (2017). Qigong/tai chi for sleep and fatigue in prostate cancer patients undergoing radiotherapy: a randomized controlled trial. *Psycho-oncology*, 26(11), 1936–1943. <https://doi.org/10.1002/pon.4256>

Molassiotis A, Vu DV, Ching SSY. The Effectiveness of Qigong in Managing a Cluster of Symptoms (Breathlessness-Fatigue-Anxiety) in Patients with Lung Cancer: A Randomized Controlled Trial. *Integr Cancer Ther*. 2021 Jan-Dec;20:15347354211008253. doi: 10.1177/15347354211008253. PMID: 33847150; PMCID: PMC8047940.

Neubert S, Schlecht S, Meng K, Rabe A, Jentschke E. Effects of a Video Sequence Based Intervention on Anxiety, Fatigue and Depression in Cancer Patients: Results of a Randomized Controlled Trial. *Integr Cancer Ther*. 2023 Jan-Dec;22:15347354231153172. doi: 10.1177/15347354231153172. PMID: 36799503; PMCID: PMC9940180.

- Pachman DR, Barton DL, Swetz KM, Loprinzi CL. Troublesome symptoms in cancer survivors: fatigue, insomnia, neuropathy, and pain. *J Clin Oncol*. 2012 Oct 20;30(30):3687-96. doi: 10.1200/JCO.2012.41.7238. Epub 2012 Sep 24. PMID: 23008320.
- Pachman, D. R., Price, K. A., & Carey, E. C. (2014). Nonpharmacologic approach to fatigue in patients with cancer. *Cancer journal (Sudbury, Mass.)*, 20(5), 313–318. <https://doi.org/10.1097/PPO.000000000000064>
- Schlecht S, Neubert S, Meng K, Rabe A, Jentschke E. Changes of Symptoms of Anxiety, Depression, and Fatigue in Cancer Patients 3 Months after a Video-Based Intervention. *Int J Environ Res Public Health*. 2023 Oct 17;20(20):6933. doi: 10.3390/ijerph20206933. PMID: 37887671; PMCID: PMC10606592.
- Sowada K. M. (2019). Qigong: Benefits for Survivors Coping With Cancer-Related Fatigue. *Clinical journal of oncology nursing*, 23(5), 465–469. <https://doi.org/10.1188/19.CJON.465-469>
- Walsh S, Wang K, Lam A, Du S, Hu Y, Sun YT, Tcharkhedian E, Nikas E, Webb G, Moylan E, Della-Fiorentina S, Fahey P, Shelley Wang X, Chen M, Zhu X. Baduanjin Mind-Body Exercise for Cancer-Related Fatigue: Protocol for a Remotely Delivered Randomized Wait-List Controlled Feasibility Study. *Integr Cancer Ther*. 2024 Jan-Dec;23:15347354231226127. doi: 10.1177/15347354231226127. PMID: 38317410; PMCID: PMC10845985.
- Wang R, Huang X, Wu Y, Sun D. The benefits of Qigong exercise for symptoms of fatigue: A protocol for systematic review and meta-analysis. *Medicine (Baltimore)*. 2021 Jan 22;100(3):e23983. doi: 10.1097/MD.00000000000023983. PMID: 33545986; PMCID: PMC7837838.
- Wu, C., Zheng, Y., Duan, Y., Lai, X., Cui, S., Xu, N., Tang, C., & Lu, L. (2019). Nonpharmacological Interventions for Cancer-Related Fatigue: A Systematic Review and Bayesian Network Meta-Analysis. *Worldviews on evidence-based nursing*, 16(2), 102–110. <https://doi.org/10.1111/wvn.12352>
- Zimmerman CS, Temereanca S, Daniels D, Penner C, Cannonier T, Jones SR, Kerr C. A Randomized Controlled Pilot Trial Comparing Effects of Qigong and Exercise/Nutrition Training on Fatigue and Other Outcomes in Female Cancer Survivors. *Integr Cancer Ther*. 2023 Jan-Dec;22:15347354231162584. doi: 10.1177/15347354231162584. PMID: 37204076; PMCID: PMC10201164.

GENERAL STUDIES

- Browning, K. K., Kue, J., Lyons, F., & Overcash, J. (2017). Feasibility of Mind-Body Movement Programs for Cancer Survivors. *Oncology nursing forum*, 44(4), 446–456. <https://doi.org/10.1188/17.ONF.446-456>
- Carlson, L. E., Zelinski, E., Toivonen, K., Flynn, M., Qureshi, M., Piedalua, K. A., & Grant, R. (2017). Mind-Body Therapies in Cancer: What Is the Latest Evidence?. *Current oncology reports*, 19(10), 67. <https://doi.org/10.1007/s11912-017-0626-1>
- Carmady, B., & Smith, C. A. (2011). Use of Chinese medicine by cancer patients: a review of surveys. *Chinese medicine*, 6, 22. <https://doi.org/10.1186/1749-8546-6-22>
- Chan, C. L., Wang, C. W., Ho, R. T., Ng, S. M., Chan, J. S., Ziea, E. T., & Wong, V. C. (2012). A systematic review of the effectiveness of qigong exercise in supportive cancer care. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*, 20(6), 1121–1133. <https://doi.org/10.1007/s00520-011-1378-3>
- Chang, P. S., & Knobf, T. (2019). Qigong Exercise and Tai Chi in Cancer Care. *Asia-Pacific journal of oncology nursing*, 6(4), 315–317. https://doi.org/10.4103/apjon.apjon_34_19
- Chaoul, A., Milbury, K., Sood, A. K., Prinsloo, S., & Cohen, L. (2014). Mind-body practices in cancer care. *Current oncology reports*, 16(12), 417. <https://doi.org/10.1007/s11912-014-0417-x>
- Chen, K. W., & Turner, F. D. (2004). A case study of simultaneous recovery from multiple physical symptoms with medical qigong therapy. *Journal of alternative and complementary medicine (New York, N.Y.)*, 10(1), 159–162. <https://doi.org/10.1089/107555304322849075>
- Chen, K., & Yeung, R. (2002). Exploratory studies of Qigong therapy for cancer in China. *Integrative cancer therapies*, 1(4), 345–370. <https://doi.org/10.1177/1534735402238187>
- Cho W. C. (2010). Scientific evidence on the supportive cancer care with Chinese medicine. *Zhongguo fei ai za zhi = Chinese journal of lung cancer*, 13(3), 190–194. <https://doi.org/10.3779/j.issn.1009-3419.2010.03.01>
- D'Andre SD, Ellsworth LL, Kirsch JL, Montane HN, Kruger MB, Donovan KA, Bronars CA, Markovic SN, Ehlers SL. Cancer and Stress: Understanding the Connections and Interventions. *Am J Lifestyle Med*. 2024 Dec 6:15598276241304373. doi: 10.1177/15598276241304373. Epub ahead of print. PMID: 39651486; PMCID: PMC11624519.
- Di Mattei VE, Perego G, Milano F, Gatti F. The Effectiveness of Nonpharmacological Interventions in the Management of Chemotherapy Physical Side Effects: A Systematic Review. *Healthcare (Basel)*. 2024 Sep 19;12(18):1880. doi: 10.3390/healthcare12181880. PMID: 39337221; PMCID: PMC11431125.

- Dobos, G. J., Kirschbaum, B., & Choi, K. E. (2012). The Western model of integrative oncology: the contribution of Chinese medicine. *Chinese journal of integrative medicine*, 18(9), 643–651. <https://doi.org/10.1007/s11655-012-1200-1>
- Elkins, G., Fisher, W., & Johnson, A. (2010). Mind-body therapies in integrative oncology. *Current treatment options in oncology*, 11(3-4), 128–140. <https://doi.org/10.1007/s11864-010-0129-x>
- Fouladbakhsh, J. M., & Stommel, M. (2010). Gender, symptom experience, and use of complementary and alternative medicine practices among cancer survivors in the U.S. cancer population. *Oncology nursing forum*, 37(1), E7–E15. <https://doi.org/10.1188/10.ONF.E7-E15>
- Kerr C. (2002). Translating "mind-in-body": two models of patient experience underlying a randomized controlled trial of qigong. *Culture, medicine and psychiatry*, 26(4), 419–447. <https://doi.org/10.1023/a:1021772324119>
- Klein, P. J., Baumgarden, J., & Schneider, R. (2019). Qigong and Tai Chi as Therapeutic Exercise: Survey of Systematic Reviews and Meta-Analyses Addressing Physical Health Conditions. *Alternative therapies in health and medicine*, 25(5), 48–53.
- Klein P. (2017). Qigong in Cancer Care: Theory, Evidence-Base, and Practice. *Medicines (Basel, Switzerland)*, 4(1), 2. <https://doi.org/10.3390/medicines4010002>
- Klein, P. J., Schneider, R., & Rhoads, C. J. (2016). Qigong in cancer care: a systematic review and construct analysis of effective Qigong therapy. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*, 24(7), 3209–3222. <https://doi.org/10.1007/s00520-016-3201-7>
- Koh T. C. (1982). Qigong--Chinese breathing exercise. *The American journal of Chinese medicine*, 10(1-4), 86–91. <https://doi.org/10.1142/S0192415X82000142>
- Kuo CC, Wang CC, Chang WL, Liao TC, Chen PE, Tung TH. Clinical Effects of Baduanjin Qigong Exercise on Cancer Patients: A Systematic Review and Meta-Analysis on Randomized Controlled Trials. *Evid Based Complement Alternat Med*. 2021 Apr 8;2021:6651238. doi: 10.1155/2021/6651238. PMID: 33880125; PMCID: PMC8049783.
- Lai H, Yang P, Wang XS, Lim D, Lam A, Shi Y, Huang Y, Zhu X. Are Published Cancer Care Trial Protocols With Traditional Chinese Medicine Interventions Concordant With SPIRIT-TCM Extension 2018? A Scoping Review on Published Trial Protocols Between 2019 and 2022. *Integr Cancer Ther*. 2024 Jan-Dec;23:15347354231223966. doi: 10.1177/15347354231223966. PMID: 38291957; PMCID: PMC10832418.
- Larkey, L., Kim, W., James, D., Kishida, M., Vizcaino, M., Huberty, J., & Krishnamurthi, N. (2020). Mind-Body and Psychosocial Interventions May Similarly Affect Heart Rate Variability Patterns in Cancer Recovery: Implications for a Mechanism of Symptom

- Improvement. *Integrative cancer therapies*, 19, 1534735420949677. <https://doi.org/10.1177/1534735420949677>
- Lee, M. S., Chen, K. W., Sancier, K. M., & Ernst, E. (2007). Qigong for cancer treatment: a systematic review of controlled clinical trials. *Acta oncologica (Stockholm, Sweden)*, 46(6), 717–722. <https://doi.org/10.1080/02841860701261584>
- Lee, M. S., Yang, S. H., Lee, K. K., & Moon, S. R. (2005). Effects of Qi therapy (external Qigong) on symptoms of advanced cancer: a single case study. *European journal of cancer care*, 14(5), 457–462. <https://doi.org/10.1111/j.1365-2354.2005.00599.x>
- Lee, M. S., & Jang, H. S. (2005). Two case reports of the acute effects of Qi therapy (external Qigong) on symptoms of cancer: short report. *Complementary therapies in clinical practice*, 11(3), 211–213. <https://doi.org/10.1016/j.ctcp.2005.01.002>
- Lei, X. F., Bi, A. H., Zhang, Z. X., & Cheng, Z. Y. (1991). The antitumor effects of qigong-emitted external Qi and its influence on the immunologic functions of tumor-bearing mice. *Journal of Tongji Medical University = Tong ji yi ke da xue xue bao*, 11(4), 253–256. <https://doi.org/10.1007/BF02888162>
- Leung KW, Yang YJ, Hui SS, Woo J. Mind-Body Health Benefits of Traditional Chinese *Qigong* on Women: A Systematic Review of Randomized Controlled Trials. *Evid Based Complement Alternat Med*. 2021 Sep 14;2021:7443498. doi: 10.1155/2021/7443498. PMID: 34567220; PMCID: PMC8457943.
- Liu, J. P., Han, M., Li, X. X., Mu, Y. J., Lewith, G., Wang, Y. Y., Witt, C. M., Yang, G. Y., Manheimer, E., Snellings, T., Berman, B., & Glud, C. (2013). Prospective registration, bias risk and outcome-reporting bias in randomised clinical trials of traditional Chinese medicine: an empirical methodological study. *BMJ open*, 3(7), e002968. <https://doi.org/10.1136/bmjopen-2013-002968>
- Loh, S. Y., Lee, S. Y., Quek, K. F., & Murray, L. (2012). Barriers to participation in a randomized controlled trial of Qigong exercises amongst cancer survivors: lessons learnt. *Asian Pacific journal of cancer prevention : APJCP*, 13(12), 6337–6342. <https://doi.org/10.7314/apjcp.2012.13.12.6337>
- Oberoi D, Piedalue KL, Pirbhai H, Guirguis S, Santa Mina D, Carlson LE. Factors related to dropout in integrative oncology clinical trials: interim analysis of an ongoing comparative effectiveness trial of mindfulness-based cancer recovery and Tai chi/Qigong for cancer health (The MATCH study). *BMC Res Notes*. 2020 Jul 17;13(1):342. doi: 10.1186/s13104-020-05172-5. PMID: 32680556; PMCID: PMC7368667.
- Mazzocco K, Milani A, Ciccarelli C, Marzorati C, Pravettoni G. Evidence for Choosing Qigong as an Integrated Intervention in Cancer Care: An Umbrella Review. *Cancers (Basel)*. 2023 Feb 12;15(4):1176. doi: 10.3390/cancers15041176. PMID: 36831519; PMCID: PMC9954038.

- McGee, Robert W. 2020. Qigong and the Treatment and Prevention of Cancer, Fayetteville State University, Broadwell College of Business and Economics, *Studies in the Economics of Qigong*, No. 7, September 14. DOI: [10.2139/ssrn.3692125](https://ssrn.com/abstract=3692125) and <https://ssrn.com/abstract=3692125>
- McGee, Robert W. (2021). Tai Chi, Qigong and the Treatment of Cancer. *Biomedical Journal of Scientific & Technical Research*, 34(5): 27,173-27,182. DOI: 10.26717/BJSTR.2021.34.005621 <https://biomedres.us/pdfs/BJSTR.MS.ID.005621.pdf>
- McGee, Robert W. (2022). Using Tai Chi and Qigong to Treat Cancer Symptoms. *Biomedical Journal of Scientific & Technical Research*, 45(2): 36333-36336. <https://biomedres.us/pdfs/BJSTR.MS.ID.007180.pdf> and <https://doi.org/10.26717/BJSTR.2022.45.007180>
- McGee, Robert W. (2022). Traditional Chinese Medicine and the Treatment of Cancer, *Biomedical Journal of Scientific & Technical Research*, 47(4): 38,636-38,639. DOI: 10.26717/BJSTR.2022.47.007520 and <https://biomedres.us/pdfs/BJSTR.MS.ID.007520.pdf> and <http://ssrn.com/abstract=4299022>
- McGee, Robert W. (2024). Using Chinese Herbal Medicine to Treat Cancer Patients: A Study Incorporating Artificial Intelligence. *Biomedical Journal of Scientific & Technical Research*, 56(5), 48647-48655. DOI: 10.26717/BJSTR.2024.56.008924
- McLennan AIG, Baydoun M, Oberoi D, Carlson L. "A Hippo Out of Water": A Qualitative Inquiry of How Cancer Survivors' Experienced In-Person and Remote-Delivered Mind-Body Therapies. *Glob Adv Integr Med Health*. 2023 Oct 28;12:27536130231207807. doi: 10.1177/27536130231207807. Erratum in: *Glob Adv Integr Med Health*. 2024 Feb 7;13:27536130231222972. doi: 10.1177/27536130231222972. PMID: 37908330; PMCID: PMC10614178.
- Mishra, S. I., Scherer, R. W., Snyder, C., Geigle, P. M., Berlanstein, D. R., & Topaloglu, O. (2012). Exercise interventions on health-related quality of life for people with cancer during active treatment. *The Cochrane database of systematic reviews*, 2012(8), CD008465. <https://doi.org/10.1002/14651858.CD008465.pub2>
- Nakandi K, Stub T, Kristoffersen AE. Clinical associations for traditional and complementary medicine use among norwegian cancer survivors in the seventh survey of the Tromsø study: a cross-sectional study. *BMC Complement Med Ther*. 2023 Mar 4;23(1):70. doi: 10.1186/s12906-023-03896-y. PMID: 36871025; PMCID: PMC9985214.
- Oh B, Van Der Saag D, Morgia M, Carroll S, Boyle F, Back M, Lamoury G. An Innovative Tai Chi and Qigong Telehealth Service in Supportive Cancer Care During the COVID-19 Pandemic and Beyond. *Am J Lifestyle Med*. 2020 Dec 24;15(4):475-477. doi: 10.1177/1559827620983762. PMID: 34366746; PMCID: PMC8299917.

- Osypiuk K, Kilgore K, Ligibel J, Vergara-Diaz G, Bonato P, Wayne PM. "Making Peace with Our Bodies": A Qualitative Analysis of Breast Cancer Survivors' Experiences with Qigong Mind-Body Exercise. *J Altern Complement Med*. 2020 Sep;26(9):825-832. doi: 10.1089/acm.2019.0406. PMID: 32924562; PMCID: PMC7488202.
- Overcash, J., Will, K. M., & Lipetz, D. W. (2013). The benefits of medical qigong in patients with cancer: a descriptive pilot study. *Clinical journal of oncology nursing*, 17(6), 654–658. <https://doi.org/10.1188/13.CJON.654-658>
- Pierce B. (2007). The use of biofield therapies in cancer care. *Clinical journal of oncology nursing*, 11(2), 253–258. <https://doi.org/10.1188/07.CJON.253-258>
- Rachlin, K., Moore, D. H., & Yount, G. (2013). Infrasound sensitizes human glioblastoma cells to cisplatin-induced apoptosis. *Integrative cancer therapies*, 12(6), 517–527. <https://doi.org/10.1177/1534735412465641>
- Sancier K. M. (1999). Therapeutic benefits of qigong exercises in combination with drugs. *Journal of alternative and complementary medicine (New York, N.Y.)*, 5(4), 383–389. <https://doi.org/10.1089/acm.1999.5.383>
- Satija, A., & Bhatnagar, S. (2017). Complementary Therapies for Symptom Management in Cancer Patients. *Indian journal of palliative care*, 23(4), 468–479. https://doi.org/10.4103/IJPC.IJPC_100_17
- Shani P, Raeesi K, Walter E, Lewis K, Wang W, Cohen L, Yeh GY, Lengacher CA, Wayne PM. Qigong mind-body program for caregivers of cancer patients: design of a pilot three-arm randomized clinical trial. *Pilot Feasibility Stud*. 2021 Mar 19;7(1):73. doi: 10.1186/s40814-021-00793-4. PMID: 33741070; PMCID: PMC7976717.
- Shneerson, C., Taskila, T., Gale, N., Greenfield, S., & Chen, Y. F. (2013). The effect of complementary and alternative medicine on the quality of life of cancer survivors: a systematic review and meta-analyses. *Complementary therapies in medicine*, 21(4), 417–429. <https://doi.org/10.1016/j.ctim.2013.05.003>
- Singh S, Nguyen T, Deleemans J, Oberoi D, Piedalue KA, Carlson LE. A Phenomenological Qualitative Exploration of Mind-Body Therapy Use and Effectiveness Among Young, Middle, and Older Adult Cancer Survivors. *Integr Cancer Ther*. 2024 Jan-Dec;23:15347354241253847. doi: 10.1177/15347354241253847. PMID: 38767143; PMCID: PMC11107309.
- Toneti, B. F., Barbosa, R., Mano, L. Y., Sawada, L. O., Oliveira, I. G., & Sawada, N. O. (2020). Benefits of Qigong as an integrative and complementary practice for health: a systematic review. *Revista latino-americana de enfermagem*, 28, e3317. <https://doi.org/10.1590/1518-8345.3718.3317>

- Van Vu, D., Molassiotis, A., Ching, S., & Le, T. T. (2017). Effects of Qigong on symptom management in cancer patients: A systematic review. *Complementary therapies in clinical practice*, 29, 111–121. <https://doi.org/10.1016/j.ctcp.2017.09.005>
- Vanderbyl, B. L., Mayer, M. J., Nash, C., Tran, A. T., Windholz, T., Swanson, T., Kasymjanova, G., & Jagoe, R. T. (2017). A comparison of the effects of medical Qigong and standard exercise therapy on symptoms and quality of life in patients with advanced cancer. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*, 25(6), 1749–1758. <https://doi.org/10.1007/s00520-017-3579-x>
- Wang, F. F., Yuan, Y., Song, Y. J., Wu, Y. Q., He, Y., Deng, X. X., Wu, S. L., Dai, D. M., & Wang, M. (2020). Exercise or sport activities for patients with cancer: A protocol for overview of systematic reviews and meta-analyses. *Medicine*, 99(20), e20084. <https://doi.org/10.1097/MD.00000000000020084>
- White, J. D., Lin, H., Jia, L., Wu, R. S., Lam, S., Li, J., Dou, J., Kumar, N., Lin, L., & Lao, L. (2017). Proceedings of the Strategy Meeting for the Development of an International Consortium for Chinese Medicine and Cancer. *Journal of global oncology*, 3(6), 814–822. <https://doi.org/10.1200/JGO.2016.005710>
- Xu J, Li H, Sze DM, Chan VWS, Yang AWH. Effectiveness of qigong and tai chi in the quality of life of patients with cancer: protocol for an umbrella review. *BMJ Open*. 2022 Apr 1;12(4):e057980. doi: 10.1136/bmjopen-2021-057980. PMID: 35365537; PMCID: PMC8977801.
- Wang FF, Yuan Y, Song YJ, Wu YQ, He Y, Deng XX, Wu SL, Dai DM, Wang M. Exercise or sport activities for patients with cancer: A protocol for overview of systematic reviews and meta-analyses. *Medicine (Baltimore)*. 2020 May;99(20):e20084. doi: 10.1097/MD.00000000000020084. PMID: 32443318; PMCID: PMC7253927.
- Yan, X., Shen, H., Jiang, H., Zhang, C., Hu, D., Wang, J., & Wu, X. (2006). External Qi of Yan Xin Qigong differentially regulates the Akt and extracellular signal-regulated kinase pathways and is cytotoxic to cancer cells but not to normal cells. *The international journal of biochemistry & cell biology*, 38(12), 2102–2113. <https://doi.org/10.1016/j.biocel.2006.06.002>
- Yun, H., Sun, L., & Mao, J. J. (2017). Growth of Integrative Medicine at Leading Cancer Centers Between 2009 and 2016: A Systematic Analysis of NCI-Designated Comprehensive Cancer Center Websites. *Journal of the National Cancer Institute. Monographs*, 2017(52), lgx004. <https://doi.org/10.1093/jncimonographs/lgx004>
- Zeng, Y., Xie, X., & Cheng, A. (2019). Qigong or Tai Chi in Cancer Care: an Updated Systematic Review and Meta-analysis. *Current oncology reports*, 21(6), 48. <https://doi.org/10.1007/s11912-019-0786-2>

Zeng, Y., Luo, T., Xie, H., Huang, M., & Cheng, A. S. (2014). Health benefits of qigong or tai chi for cancer patients: a systematic review and meta-analyses. *Complementary therapies in medicine*, 22(1), 173–186. <https://doi.org/10.1016/j.ctim.2013.11.010>

Zhang J, Su Q, Li SC. Qigong Exercise Balances Oxygen Supply and Acid-Base to Modulate Hypoxia: A Perspective Platform toward Preemptive Health & Medicine. *Med Sci (Basel)*. 2023 Feb 28;11(1):21. doi: 10.3390/medsci11010021. PMID: 36976529; PMCID: PMC10057714.

Zhang, Y. P., Hu, R. X., Han, M., Lai, B. Y., Liang, S. B., Chen, B. J., Robinson, N., Chen, K., & Liu, J. P. (2020). Evidence Base of Clinical Studies on Qi Gong: A Bibliometric Analysis. *Complementary therapies in medicine*, 50, 102392. <https://doi.org/10.1016/j.ctim.2020.102392>

Zhang Y, Yao F, Kuang X, Li L, Huang L, Zhou Q, Peng J, Chang Q. How Can Alternative Exercise Traditions Help Against the Background of the COVID-19 in Cancer Care? An Overview of Systematic Reviews. *Cancer Manag Res*. 2020 Dec 17;12:12927-12944. doi: 10.2147/CMAR.S282491. PMID: 33363409; PMCID: PMC7753005.

IMMUNE FUNCTION

Oh, B., Butow, P., Mullan, B., Hale, A., Lee, M. S., Guo, X., & Clarke, S. (2012). A critical review of the effects of medical Qigong on quality of life, immune function, and survival in cancer patients. *Integrative cancer therapies*, 11(2), 101–110. <https://doi.org/10.1177/1534735411413268>

INSOMNIA AND CANCER

Birling Y, Nevitt S, Bhuyan DJ, Jia M, Feng F, Carlson LE, Pham T, Liu J, Ayati Z, Nyiam L, Yu Z, Fahey P. Mind-Body Therapies for Cancer Patients Living with Depression, Anxiety or Insomnia (MIRACLE): A Systematic Review with Individual Participant Data Network Meta-Analysis. *Methods Protoc*. 2021 Oct 19;4(4):76. doi: 10.3390/mps4040076. PMID: 34698240; PMCID: PMC8544545.

Chuang CW, Tsai MY, Wu SC, Liao WC. Chinese Medicines Treatment for Sleep Disturbance in Breast Cancer Survivors: A Network Meta-Analysis. *Integr Cancer Ther*. 2024 Jan-Dec;23:15347354241308857. doi: 10.1177/15347354241308857. PMID: 39704364; PMCID: PMC11662389.

Ee C, Kay S, Reynolds A, Lovato N, Lacey J, Koczwara B. Lifestyle and integrative oncology interventions for cancer-related fatigue and sleep disturbances. *Maturitas*. 2024 Sep;187:108056. doi: 10.1016/j.maturitas.2024.108056. Epub 2024 Jun 21. PMID: 38981156.

- Fong, S. S., Ng, S. S., Lee, H. W., Pang, M. Y., Luk, W. S., Chung, J. W., Wong, J. Y., & Masters, R. S. (2015). The effects of a 6-month Tai Chi Qigong training program on temporomandibular, cervical, and shoulder joint mobility and sleep problems in nasopharyngeal cancer survivors. *Integrative cancer therapies, 14*(1), 16–25. <https://doi.org/10.1177/1534735414556508>
- Garland, S. N., Mahon, K., & Irwin, M. R. (2019). Integrative Approaches for Sleep Health in Cancer Survivors. *Cancer journal (Sudbury, Mass.), 25*(5), 337–342. <https://doi.org/10.1097/PPO.0000000000000398>
- Han J, Cheng HL, Bi LN, Molasiotis A. Mind-body therapies for sleep disturbance among patients with cancer: A systematic review and meta-analysis. *Complement Ther Med.* 2023 Aug;75:102954. doi: 10.1016/j.ctim.2023.102954. Epub 2023 May 25. PMID: 37244384.
- Jiang L, Ouyang J, Du X. Effects of traditional Chinese medicine exercise therapy on cancer-related fatigue, anxiety and sleep quality in cancer patients: A protocol for systematic review and network meta-analysis. *Medicine (Baltimore).* 2021 Nov 5;100(44):e27681. doi: 10.1097/MD.00000000000027681. PMID: 34871250; PMCID: PMC8568422.
- Kim, S., Lee, S., Kwon, O., Park, S., Seo, J., & Kim, K. (2015). Qigong program on insomnia and stress in cancer patients: A case series report. *SAGE open medical case reports, 3*, 2050313X14556408. <https://doi.org/10.1177/2050313X14556408>
- Kreutz, C., Schmidt, M. E., & Steindorf, K. (2019). Effects of physical and mind-body exercise on sleep problems during and after breast cancer treatment: a systematic review and meta-analysis. *Breast cancer research and treatment, 176*(1), 1–15. <https://doi.org/10.1007/s10549-019-05217-9>
- Liu H, Liu S, Xiong L, Luo B. Effects of traditional Chinese exercise on sleep quality: A systematic review and meta-analysis of randomized controlled trials. *Medicine (Baltimore).* 2023 Nov 3;102(44):e35767. doi: 10.1097/MD.00000000000035767. PMID: 37933009; PMCID: PMC10627671.
- Liu, W., Schaffer, L., Herrs, N., Chollet, C., & Taylor, S. (2015). Improved sleep after Qigong exercise in breast cancer survivors: A pilot study. *Asia-Pacific journal of oncology nursing, 2*(4), 232–239. <https://doi.org/10.4103/2347-5625.170537>
- Matthews, E. E., Janssen, D. W., Djalilova, D. M., & Berger, A. M. (2018). Effects of Exercise on Sleep in Women with Breast Cancer: A Systematic Review. *Sleep medicine clinics, 13*(3), 395–417. <https://doi.org/10.1016/j.jsmc.2018.04.007>
- McQuade, J. L., Prinsloo, S., Chang, D. Z., Spelman, A., Wei, Q., Basen-Engquist, K., Harrison, C., Zhang, Z., Kuban, D., Lee, A., & Cohen, L. (2017). Qigong/tai chi for sleep and

fatigue in prostate cancer patients undergoing radiotherapy: a randomized controlled trial. *Psycho-oncology*, 26(11), 1936–1943. <https://doi.org/10.1002/pon.4256>

Pachman DR, Barton DL, Swetz KM, Loprinzi CL. Troublesome symptoms in cancer survivors: fatigue, insomnia, neuropathy, and pain. *J Clin Oncol*. 2012 Oct 20;30(30):3687-96. doi: 10.1200/JCO.2012.41.7238. Epub 2012 Sep 24. PMID: 23008320.

JOINT MOBILITY

Fong, S. S., Ng, S. S., Lee, H. W., Pang, M. Y., Luk, W. S., Chung, J. W., Wong, J. Y., & Masters, R. S. (2015). The effects of a 6-month Tai Chi Qigong training program on temporomandibular, cervical, and shoulder joint mobility and sleep problems in nasopharyngeal cancer survivors. *Integrative cancer therapies*, 14(1), 16–25. <https://doi.org/10.1177/1534735414556508>

LEUKEMIA

Lee, Myeong. (2004). Qi therapy as a complementary therapy in chronic myeloid leukemia. *Oriental Pharmacy and Experimental Medicine* 4(4), 275-277. <http://koreascience.or.kr/article/JAKO200403043175771.pdf>

McGee, Robert W. (2025). Using Tai Chi and Qigong to Treat Leukemia Patients, forthcoming.

LUNG CANCER

Henshall, C. L., Allin, L., & Aveyard, H. (2019). A Systematic Review and Narrative Synthesis to Explore the Effectiveness of Exercise-Based Interventions in Improving Fatigue, Dyspnea, and Depression in Lung Cancer Survivors. *Cancer nursing*, 42(4), 295–306. <https://doi.org/10.1097/NCC.0000000000000605>

McGee, Robert W. (2024). Tai Chi, Qigong and the Treatment of Lung Cancer: A Study in Artificial Intelligence, *Biomedical Journal of Scientific & Technical Research*, 55(4), 47220-47225 (2024). DOI: 10.26717/BJSTR.2024.55.008736

Molassiotis A, Vu DV, Ching SSY. The Effectiveness of Qigong in Managing a Cluster of Symptoms (Breathlessness-Fatigue-Anxiety) in Patients with Lung Cancer: A Randomized Controlled Trial. *Integr Cancer Ther*. 2021 Jan-Dec;20:15347354211008253. doi: 10.1177/15347354211008253. PMID: 33847150; PMCID: PMC8047940.

Yan, X., Shen, H., Jiang, H., Hu, D., Wang, J., & Wu, X. (2018). YXQ-EQ Induces Apoptosis and Inhibits Signaling Pathways Important for Metastasis in Non-Small Cell Lung Carcinoma Cells. *Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology*, 49(3), 911–919. <https://doi.org/10.1159/000493223>

Yan, X., Li, F., Dozmorov, I., Frank, M. B., Dao, M., Centola, M., Cao, W., & Hu, D. (2012). External Qi of Yan Xin Qigong induces cell death and gene expression alterations promoting apoptosis and inhibiting proliferation, migration and glucose metabolism in small-cell lung cancer cells. *Molecular and cellular biochemistry*, 363(1-2), 245–255. <https://doi.org/10.1007/s11010-011-1176-8>

LYMPHEDEMA

Panchik, D., Masco, S., Zinnikas, P., Hillriegel, B., Lauder, T., Suttmann, E., Chinchilli, V., McBeth, M., & Hermann, W. (2019). Effect of Exercise on Breast Cancer-Related Lymphedema: What the Lymphatic Surgeon Needs to Know. *Journal of reconstructive microsurgery*, 35(1), 37–45. <https://doi.org/10.1055/s-0038-1660832>

NASOPHARYNGEAL CANCER

Fong, S. S., Ng, S. S., Lee, H. W., Pang, M. Y., Luk, W. S., Chung, J. W., Wong, J. Y., & Masters, R. S. (2015). The effects of a 6-month Tai Chi Qigong training program on temporomandibular, cervical, and shoulder joint mobility and sleep problems in nasopharyngeal cancer survivors. *Integrative cancer therapies*, 14(1), 16–25. <https://doi.org/10.1177/1534735414556508>

Fong, S. S., Wong, J. Y., Chung, L. M., Yam, T. T., Chung, J. W., Lee, Y. M., Chow, L. P., Luk, W. S., & Ng, S. S. (2015). Changes in heart-rate variability of survivors of nasopharyngeal cancer during Tai Chi Qigong practice. *Journal of physical therapy science*, 27(5), 1577–1579. <https://doi.org/10.1589/jpts.27.1577>

Fong SS, Ng SS, Luk WS, Chung LM, Wong JY, Chung JW. Effects of qigong training on health-related quality of life, functioning, and cancer-related symptoms in survivors of nasopharyngeal cancer: a pilot study. *Evid Based Complement Alternat Med*. 2014;2014:495274. doi:10.1155/2014/495274

Fong, S. S., Chung, L. M., Tsang, W. W., Leung, J. C., Charm, C. Y., Luk, W. S., Chow, L. P., & Ng, S. S. (2014). Balance Performance in Irradiated Survivors of Nasopharyngeal Cancer with and without Tai Chi Qigong Training. *Evidence-based complementary and alternative medicine : eCAM*, 2014, 719437. <https://doi.org/10.1155/2014/719437>

Fong, S. S., Ng, S. S., Luk, W. S., Chung, J. W., Leung, J. C., & Masters, R. S. (2014). Effects of a 6-month Tai Chi Qigong program on arterial hemodynamics and functional aerobic capacity in survivors of nasopharyngeal cancer. *Journal of cancer survivorship : research and practice*, 8(4), 618–626. <https://doi.org/10.1007/s11764-014-0372-4>

NON-HODGKIN LYMPHOMA

Chuang, T. Y., Yeh, M. L., & Chung, Y. C. (2017). A nurse facilitated mind-body interactive exercise (Chan-Chuang qigong) improves the health status of non-Hodgkin lymphoma patients receiving chemotherapy: Randomised controlled trial. *International journal of nursing studies*, 69, 25–33. <https://doi.org/10.1016/j.ijnurstu.2017.01.004>

Vargas-Román K, De la Fuente-Solana EI, Cortés-Martín J, Sánchez-García JC, González-Vargas CJ, Díaz-Rodríguez L. Effect of a 16-Session Qigong Program in Non-Hodgkin Lymphoma Survivors: A Randomized Clinical Trial. *J Clin Med*. 2022 Jun 14;11(12):3421. doi: 10.3390/jcm11123421. PMID: 35743490; PMCID: PMC9225257.

PAIN MANAGEMENT AND CANCER

Bao, Y., Kong, X., Yang, L., Liu, R., Shi, Z., Li, W., Hua, B., & Hou, W. (2014). Complementary and alternative medicine for cancer pain: an overview of systematic reviews. *Evidence-based complementary and alternative medicine : eCAM*, 2014, 170396. <https://doi.org/10.1155/2014/170396>

Deng G. (2019). Integrative Medicine Therapies for Pain Management in Cancer Patients. *Cancer journal (Sudbury, Mass.)*, 25(5), 343–348. <https://doi.org/10.1097/PPO.0000000000000399>

Di Mattei VE, Perego G, Milano F, Gatti F. The Effectiveness of Nonpharmacological Interventions in the Management of Chemotherapy Physical Side Effects: A Systematic Review. *Healthcare (Basel)*. 2024 Sep 19;12(18):1880. doi: 10.3390/healthcare12181880. PMID: 39337221; PMCID: PMC11431125.

Maindet, C., Burnod, A., Minello, C., George, B., Allano, G., & Lemaire, A. (2019). Strategies of complementary and integrative therapies in cancer-related pain-attaining exhaustive cancer pain management. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*, 27(8), 3119–3132. <https://doi.org/10.1007/s00520-019-04829-7>

Omura Y. (2004). Special sunrise & sunset solar energy stored papers and their clinical applications for intractable pain, circulatory disturbances & cancer: comparison of beneficial effects between Special Solar Energy Stored Paper and Qigong Energy Stored Paper. *Acupuncture & electro-therapeutics research*, 29(1-2), 1–42. <https://doi.org/10.3727/036012904815901551>

Pachman DR, Barton DL, Swetz KM, Loprinzi CL. Troublesome symptoms in cancer survivors: fatigue, insomnia, neuropathy, and pain. *J Clin Oncol*. 2012 Oct 20;30(30):3687-96. doi: 10.1200/JCO.2012.41.7238. Epub 2012 Sep 24. PMID: 23008320.

Park KU. Assessment of change of quality of life in terminally ill patients under cancer pain management using the EORTC Core Quality of Life Questionnaire (QLQ-C30) in a

Korean sample. *Oncology*. 2008;74 Suppl 1:7-12. doi: 10.1159/000143212. Epub 2008 Aug 28. PMID: 18758191.

Quixadá AP, Miranda JGV, Osypiuk K, Bonato P, Vergara-Diaz G, Ligibel JA, Mehling W, Thompson ET, Wayne PM. Qigong Training Positively Impacts Both Posture and Mood in Breast Cancer Survivors With Persistent Post-surgical Pain: Support for an Embodied Cognition Paradigm. *Front Psychol*. 2022 Feb 21;13:800727. doi: 10.3389/fpsyg.2022.800727. PMID: 35265005; PMCID: PMC8900705.

Tang, S. K., Tse, M., Leung, S. F., & Fotis, T. (2019). The effectiveness, suitability, and sustainability of non-pharmacological methods of managing pain in community-dwelling older adults: a systematic review. *BMC public health*, 19(1), 1488. <https://doi.org/10.1186/s12889-019-7831-9>

PANCREATIC CANCER

Yan X, Shen H, Jiang H, Zhang C, Hu D, Wang J, Wu X. External Qi of Yan Xin Qigong differentially regulates the Akt and extracellular signal-regulated kinase pathways and is cytotoxic to cancer cells but not to normal cells. *Int J Biochem Cell Biol*. 2006;38(12):2102-13. doi: 10.1016/j.biocel.2006.06.002. Epub 2006 Jun 27. PMID: 16893670.

PROSTATE CANCER

Campo, R. A., Agarwal, N., LaStayo, P. C., O'Connor, K., Pappas, L., Boucher, K. M., Gardner, J., Smith, S., Light, K. C., & Kinney, A. Y. (2014). Levels of fatigue and distress in senior prostate cancer survivors enrolled in a 12-week randomized controlled trial of Qigong. *Journal of cancer survivorship : research and practice*, 8(1), 60–69. <https://doi.org/10.1007/s11764-013-0315-5>

Kinney, A. Y., Blair, C. K., Guest, D. D., Ani, J. K., Harding, E. M., Amorim, F., Boyce, T., Rodman, J., Ford, C. G., Schwartz, M., Rosenberg, L., Foran, O., Gardner, J., Lin, Y., Arap, W., & Irwin, M. R. (2019). Biobehavioral effects of Tai Chi Qigong in men with prostate cancer: Study design of a three-arm randomized clinical trial. *Contemporary clinical trials communications*, 16, 100431. <https://doi.org/10.1016/j.conctc.2019.100431>

McQuade, J. L., Prinsloo, S., Chang, D. Z., Spelman, A., Wei, Q., Basen-Engquist, K., Harrison, C., Zhang, Z., Kuban, D., Lee, A., & Cohen, L. (2017). Qigong/tai chi for sleep and fatigue in prostate cancer patients undergoing radiotherapy: a randomized controlled trial. *Psycho-oncology*, 26(11), 1936–1943. <https://doi.org/10.1002/pon.4256>

Yan, X., Shen, H., Jiang, H., Zhang, C., Hu, D., Wang, J., & Wu, X. (2008). External Qi of Yan Xin Qigong induces G2/M arrest and apoptosis of androgen-independent prostate cancer

cells by inhibiting Akt and NF-kappa B pathways. *Molecular and cellular biochemistry*, 310(1-2), 227–234. <https://doi.org/10.1007/s11010-007-9684-2>

QI THERAPY (a.k.a. External Qi Therapy)

Chen K, Yeung R. Exploratory studies of Qigong therapy for cancer in China. *Integr Cancer Ther*. 2002 Dec;1(4):345-70. doi: 10.1177/1534735402238187. PMID: 14664729.

Cohen, L., Chen, Z., Arun, B., Shao, Z., Dryden, M., Xu, L., Le-Petross, C., Dogan, B., McKenna, B. J., Markman, M., & Babiera, G. (2010). External qigong therapy for women with breast cancer prior to surgery. *Integrative cancer therapies*, 9(4), 348–353. <https://doi.org/10.1177/1534735410387424>

Lee, Myeong. (2004). Qi therapy as a complementary therapy in chronic myeloid leukemia. *Oriental Pharmacy and Experimental Medicine* 4(4), 275-277. <http://koreascience.or.kr/article/JAKO200403043175771.pdf>

Lee MS, Jang HS. Two case reports of the acute effects of Qi therapy (external Qigong) on symptoms of cancer: short report. *Complement Ther Clin Pract*. 2005 Aug;11(3):211-3. doi: 10.1016/j.ctcp.2005.01.002. PMID: 16005839.

Lee MS, Yang SH, Lee KK, Moon SR. Effects of Qi therapy (external Qigong) on symptoms of advanced cancer: a single case study. *Eur J Cancer Care (Engl)*. 2005 Dec;14(5):457-62. doi: 10.1111/j.1365-2354.2005.00599.x. PMID: 16274468.

Yang KH, Kim YH, Lee MS. Efficacy of Qi-therapy (external Qigong) for elderly people with chronic pain. *Int J Neurosci*. 2005 Jul;115(7):949-63. doi: 10.1080/00207450590901378. PMID: 16051542.

Lee, M. S., Yang, S. H., Lee, K. K., & Moon, S. R. (2005). Effects of Qi therapy (external Qigong) on symptoms of advanced cancer: a single case study. *European journal of cancer care*, 14(5), 457–462. <https://doi.org/10.1111/j.1365-2354.2005.00599.x>

Lee, M. S., & Jang, H. S. (2005). Two case reports of the acute effects of Qi therapy (external Qigong) on symptoms of cancer: short report. *Complementary therapies in clinical practice*, 11(3), 211–213. <https://doi.org/10.1016/j.ctcp.2005.01.002>

Lei, X. F., Bi, A. H., Zhang, Z. X., & Cheng, Z. Y. (1991). The antitumor effects of qigong-emitted external Qi and its influence on the immunologic functions of tumor-bearing mice. *Journal of Tongji Medical University = Tong ji yi ke da xue xue bao*, 11(4), 253–256. <https://doi.org/10.1007/BF02888162>

Yan, X., Shen, H., Jiang, H., Zhang, C., Hu, D., Wang, J., & Wu, X. (2006). External Qi of Yan Xin Qigong differentially regulates the Akt and extracellular signal-regulated kinase pathways and is cytotoxic to cancer cells but not to normal cells. *The international*

journal of biochemistry & cell biology, 38(12), 2102–2113.
<https://doi.org/10.1016/j.biocel.2006.06.002>

Yan, X., Shen, H., Jiang, H., Zhang, C., Hu, D., Wang, J., & Wu, X. (2008). External Qi of Yan Xin Qigong induces G2/M arrest and apoptosis of androgen-independent prostate cancer cells by inhibiting Akt and NF-kappa B pathways. *Molecular and cellular biochemistry*, 310(1-2), 227–234. <https://doi.org/10.1007/s11010-007-9684-2>

Yan, X., Shen, H., Jiang, H., Hu, D., Zhang, C., Wang, J., & Wu, X. (2010). External Qi of Yan Xin Qigong Induces apoptosis and inhibits migration and invasion of estrogen-independent breast cancer cells through suppression of Akt/NF-kB signaling. *Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology*, 25(2-3), 263–270. <https://doi.org/10.1159/000276560>

Yan, X., Li, F., Dozmorov, I., Frank, M. B., Dao, M., Centola, M., Cao, W., & Hu, D. (2012). External Qi of Yan Xin Qigong induces cell death and gene expression alterations promoting apoptosis and inhibiting proliferation, migration and glucose metabolism in small-cell lung cancer cells. *Molecular and cellular biochemistry*, 363(1-2), 245–255. <https://doi.org/10.1007/s11010-011-1176-8>

Yan, X., Shen, H., Jiang, H., Hu, D., Wang, J., & Wu, X. (2013). External Qi of Yan Xin Qigong inhibits activation of Akt, Erk1/2 and NF-kB and induces cell cycle arrest and apoptosis in colorectal cancer cells. *Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology*, 31(1), 113–122. <https://doi.org/10.1159/000343354>

QUALITY OF LIFE AND CANCER

Bailey LE, Morris MA. Mind-body therapies adjuvant to chemotherapy improve quality of life and fatigue in top cancers: A systematic review and meta-analysis. *Complement Ther Clin Pract*. 2024 Feb;54:101811. doi: 10.1016/j.ctcp.2023.101811. Epub 2023 Nov 24. PMID: 38029633.

Chen, X., Gong, X., Shi, C., Sun, L., Tang, Z., Yuan, Z., Wang, J., & Yu, J. (2018). Multi-focused psychosocial residential rehabilitation interventions improve quality of life among cancer survivors: a community-based controlled trial. *Journal of translational medicine*, 16(1), 250. <https://doi.org/10.1186/s12967-018-1618-0>

Chen, Z., Meng, Z., Milbury, K., Bei, W., Zhang, Y., Thornton, B., Liao, Z., Wei, Q., Chen, J., Guo, X., Liu, L., McQuade, J., Kirschbaum, C., & Cohen, L. (2013). Qigong improves quality of life in women undergoing radiotherapy for breast cancer: results of a randomized controlled trial. *Cancer*, 119(9), 1690–1698. <https://doi.org/10.1002/cncr.27904>

- Cheng, T. C., Lee, Y. H., Mar, C. L., Huang, W. T., & Chang, Y. P. (2020). The Health Promoting Mindfulness or Qigong Educational Programs for Beneficial Lifestyle Changes of Cancer Survivors. *Journal of cancer education : the official journal of the American Association for Cancer Education*, 35(4), 743–750. <https://doi.org/10.1007/s13187-019-01522-5>
- Fong SS, Ng SS, Luk WS, Chung LM, Wong JY, Chung JW. Effects of qigong training on health-related quality of life, functioning, and cancer-related symptoms in survivors of nasopharyngeal cancer: a pilot study. *Evid Based Complement Alternat Med*. 2014;2014:495274. doi:10.1155/2014/495274
- Fong, S. S., Ng, S. S., Luk, W. S., Chung, J. W., Chung, L. M., Tsang, W. W., & Chow, L. P. (2013). Shoulder Mobility, Muscular Strength, and Quality of Life in Breast Cancer Survivors with and without Tai Chi Qigong Training. *Evidence-based complementary and alternative medicine : eCAM*, 2013, 787169. <https://doi.org/10.1155/2013/787169>
- Ford CG, Vowles KE, Smith BW, Kinney AY. Mindfulness and Meditative Movement Interventions for Men Living With Cancer: A Meta-analysis. *Ann Behav Med*. 2020 Apr 20;54(5):360-373. doi: 10.1093/abm/kaz053. PMID: 31773148; PMCID: PMC7168578.
- Huang, S. M., Tseng, L. M., Chien, L. Y., Tai, C. J., Chen, P. H., Hung, C. T., & Hsiung, Y. (2016). Effects of non-sporting and sporting qigong on frailty and quality of life among breast cancer patients receiving chemotherapy. *European journal of oncology nursing : the official journal of European Oncology Nursing Society*, 21, 257–265. <https://doi.org/10.1016/j.ejon.2015.10.012>
- Husebø, A., & Husebø, T. L. (2017). Quality of Life and Breast Cancer: How Can Mind-Body Exercise Therapies Help? An Overview Study. *Sports (Basel, Switzerland)*, 5(4), 79. <https://doi.org/10.3390/sports5040079>
- Kelley, G. A., & Kelley, K. S. (2015). Meditative Movement Therapies and Health-Related Quality-of-Life in Adults: A Systematic Review of Meta-Analyses. *PloS one*, 10(6), e0129181. <https://doi.org/10.1371/journal.pone.0129181>
- King, M. T., Bell, M. L., Costa, D., Butow, P., & Oh, B. (2014). The Quality of Life Questionnaire Core 30 (QLQ-C30) and Functional Assessment of Cancer-General (FACT-G) differ in responsiveness, relative efficiency, and therefore required sample size. *Journal of clinical epidemiology*, 67(1), 100–107. <https://doi.org/10.1016/j.jclinepi.2013.02.019>
- Li C, Dong X, Yu L, Yuan K, Yi X, Shen Y, Niu H. The effects of qigong intervention based on the Internet on quality of life and physical fitness in Chinese postoperative breast cancer patients: a protocol of randomized controlled trial. *Trials*. 2023 Mar 13;24(1):186. doi: 10.1186/s13063-023-07187-2. PMID: 36915187; PMCID: PMC10010003.

- Li P, Wang Q, Liu L, Zhang Q, Zhou R, Wang Y, Liu T, Feng L. The Role of Complementary and Alternative Medicine on Cancer-Related Fatigue in Adults: An Overview of Systematic Reviews. *Integr Cancer Ther.* 2023 Jan-Dec;22:15347354231188947. doi: 10.1177/15347354231188947. PMID: 37515495; PMCID: PMC10387784.
- Lin, W. F., Zhong, M. F., Zhou, Q. H., Zhang, Y. R., Wang, H., Zhao, Z. H., Cheng, B. B., & Ling, C. Q. (2019). Efficacy of complementary and integrative medicine on health-related quality of life in cancer patients: a systematic review and meta-analysis. *Cancer management and research*, *11*, 6663–6680. <https://doi.org/10.2147/CMAR.S195935>
- Loh, S. Y., Lee, S. Y., & Murray, L. (2014). The Kuala Lumpur Qigong trial for women in the cancer survivorship phase—efficacy of a three-arm RCT to improve QOL. *Asian Pacific journal of cancer prevention : APJCP*, *15*(19), 8127–8134. <https://doi.org/10.7314/apjcp.2014.15.19.8127>
- Mishra, S. I., Scherer, R. W., Geigle, P. M., Berlanstein, D. R., Topaloglu, O., Gotay, C. C., & Snyder, C. (2012). Exercise interventions on health-related quality of life for cancer survivors. *The Cochrane database of systematic reviews*, *2012*(8), CD007566. <https://doi.org/10.1002/14651858.CD007566.pub2>
- Oh, B., Butow, P. N., Mullan, B. A., Clarke, S. J., Beale, P. J., Pavlakis, N., Lee, M. S., Rosenthal, D. S., Larkey, L., & Vardy, J. (2012). Effect of medical Qigong on cognitive function, quality of life, and a biomarker of inflammation in cancer patients: a randomized controlled trial. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*, *20*(6), 1235–1242. <https://doi.org/10.1007/s00520-011-1209-6>
- Oh, B., Butow, P., Mullan, B., Hale, A., Lee, M. S., Guo, X., & Clarke, S. (2012). A critical review of the effects of medical Qigong on quality of life, immune function, and survival in cancer patients. *Integrative cancer therapies*, *11*(2), 101–110. <https://doi.org/10.1177/1534735411413268>
- Oh, B., Butow, P., Mullan, B., Clarke, S., Beale, P., Pavlakis, N., Kothe, E., Lam, L., & Rosenthal, D. (2010). Impact of medical Qigong on quality of life, fatigue, mood and inflammation in cancer patients: a randomized controlled trial. *Annals of oncology : official journal of the European Society for Medical Oncology*, *21*(3), 608–614. <https://doi.org/10.1093/annonc/mdp479>
- Rosenbaum, E., Gautier, H., Fobair, P., Neri, E., Festa, B., Hawn, M., Andrews, A., Hirshberger, N., Selim, S., & Spiegel, D. (2004). Cancer supportive care, improving the quality of life for cancer patients. A program evaluation report. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*, *12*(5), 293–301. <https://doi.org/10.1007/s00520-004-0599-0>
- Tao, W. W., Jiang, H., Tao, X. M., Jiang, P., Sha, L. Y., & Sun, X. C. (2016). Effects of Acupuncture, Tuina, Tai Chi, Qigong, and Traditional Chinese Medicine Five-Element

- Music Therapy on Symptom Management and Quality of Life for Cancer Patients: A Meta-Analysis. *Journal of pain and symptom management*, 51(4), 728–747. <https://doi.org/10.1016/j.jpainsymman.2015.11.027>
- Tao, W., Luo, X., Cui, B., Liang, D., Wang, C., Duan, Y., Li, X., Zhou, S., Zhao, M., Li, Y., He, Y., Wang, S., Kelley, K. W., Jiang, P., & Liu, Q. (2015). Practice of traditional Chinese medicine for psycho-behavioral intervention improves quality of life in cancer patients: A systematic review and meta-analysis. *Oncotarget*, 6(37), 39725–39739. <https://doi.org/10.18632/oncotarget.5388>
- Vanderbyl, B. L., Mayer, M. J., Nash, C., Tran, A. T., Windholz, T., Swanson, T., Kasymjanova, G., & Jagoe, R. T. (2017). A comparison of the effects of medical Qigong and standard exercise therapy on symptoms and quality of life in patients with advanced cancer. *Supportive care in cancer : official journal of the Multinational Association of Supportive Care in Cancer*, 25(6), 1749–1758. <https://doi.org/10.1007/s00520-017-3579-x>
- Wang CC, Geraghty S, Fox-Harding C, Wang C. Effects of a nurse-led Tai Chi programme on improving quality of life, mental wellbeing, and physical function of women with breast cancer: Protocol for a randomized controlled trial. *Womens Health (Lond)*. 2022 Jan-Dec;18:17455057221127813. doi: 10.1177/17455057221127813. PMID: 36165224; PMCID: PMC9520183.
- Wayne, P. M., Lee, M. S., Novakowski, J., Osypiuk, K., Ligibel, J., Carlson, L. E., & Song, R. (2018). Tai Chi and Qigong for cancer-related symptoms and quality of life: a systematic review and meta-analysis. *Journal of cancer survivorship : research and practice*, 12(2), 256–267. <https://doi.org/10.1007/s11764-017-0665-5>
- Yao LX, Zhou YB, Yuan YX, Li XF, Li XF. Network meta-analysis evaluating the impact of diverse exercise regimens on quality of life in women post-breast cancer surgery. *Medicine (Baltimore)*. 2024 Oct 18;103(42):e40009. doi: 10.1097/MD.00000000000040009. PMID: 39432638; PMCID: PMC11495728.
- Ye XX, Ren ZY, Vafaei S, Zhang JM, Song Y, Wang YX, Song PG. Effectiveness of Baduanjin Exercise on Quality of Life and Psychological Health in Postoperative Patients With Breast Cancer: A Systematic Review and Meta-analysis. *Integr Cancer Ther*. 2022 Jan-Dec;21:15347354221104092. doi: 10.1177/15347354221104092. PMID: 35699146; PMCID: PMC9202258.

RECOVERY AND CANCER

- Carlson, L. E., Oberoi, D. V., Qureshi, M., & Subnis, U. (2018). Integrative Oncology Trials in the Real World: Assessing the Pragmatism of an Ongoing Integrative Oncology Trial of Mindfulness and Tai Chi/Qigong. *Journal of alternative and complementary medicine (New York, N.Y.)*, 24(9-10), 926–932. <https://doi.org/10.1089/acm.2018.0208>

Carlson, L. E., Zelinski, E. L., Specia, M., Balneaves, L. G., Jones, J. M., Santa Mina, D., Wayne, P. M., Campbell, T. S., Giese-Davis, J., Faris, P., Zwicker, J., Patel, K., Beattie, T. L., Cole, S., Toivonen, K., Nation, J., Peng, P., Thong, B., Wong, R., & Vohra, S. (2017). Protocol for the MATCH study (Mindfulness and Tai Chi for cancer health): A preference-based multi-site randomized comparative effectiveness trial (CET) of Mindfulness-Based Cancer Recovery (MBCR) vs. Tai Chi/Qigong (TCQ) for cancer survivors. *Contemporary clinical trials*, *59*, 64–76. <https://doi.org/10.1016/j.cct.2017.05.015>

Oberoi, D., Piedalue, K. L., Pirbhai, H., Guirguis, S., Santa Mina, D., & Carlson, L. E. (2020). Factors related to dropout in integrative oncology clinical trials: interim analysis of an ongoing comparative effectiveness trial of mindfulness-based cancer recovery and Tai chi/Qigong for cancer health (The MATCH study). *BMC research notes*, *13*(1), 342. <https://doi.org/10.1186/s13104-020-05172-5>

REHABILITATION

Chen, X., Gong, X., Shi, C., Sun, L., Tang, Z., Yuan, Z., Wang, J., & Yu, J. (2018). Multi-focused psychosocial residential rehabilitation interventions improve quality of life among cancer survivors: a community-based controlled trial. *Journal of translational medicine*, *16*(1), 250. <https://doi.org/10.1186/s12967-018-1618-0>

Lee, Y. H., Lai, G. M., Lee, D. C., Tsai Lai, L. J., & Chang, Y. P. (2018). Promoting Physical and Psychological Rehabilitation Activities and Evaluating Potential Links Among Cancer-Related Fatigue, Fear of Recurrence, Quality of Life, and Physiological Indicators in Cancer Survivors. *Integrative cancer therapies*, *17*(4), 1183–1194. <https://doi.org/10.1177/1534735418805149>

Ruddy, K. J., Stan, D. L., Bhagra, A., Jurisson, M., & Cheville, A. L. (2017). Alternative Exercise Traditions in Cancer Rehabilitation. *Physical medicine and rehabilitation clinics of North America*, *28*(1), 181–192. <https://doi.org/10.1016/j.pmr.2016.08.002>

SURVIVAL

Oh, B., Butow, P., Mullan, B., Hale, A., Lee, M. S., Guo, X., & Clarke, S. (2012). A critical review of the effects of medical Qigong on quality of life, immune function, and survival in cancer patients. *Integrative cancer therapies*, *11*(2), 101–110. <https://doi.org/10.1177/1534735411413268>

REFERENCES

PubMed.gov. National Library of Medicine, National Center for Biotechnology Information, National Institute of Health. <https://pubmed.ncbi.nlm.nih.gov/>

PAPERS IN THE ECONOMICS OF QIGONG SERIES

- 1 Qigong: A Bibliography of Books and Other Materials, Fayetteville State University, Broadwell College of Business and Economics, *Studies in the Economics of Qigong, No. 1*, August 25, 2020. Robert W. McGee. <http://ssrn.com/abstract=3685542>
- 2 A Bibliography of Recent Medical Research on Qigong, Fayetteville State University, Broadwell College of Business and Economics, *Studies in the Economics of Qigong, No. 2*, August 31, 2020. Robert W. McGee. <http://ssrn.com/abstract=3685561>
- 3 Ba Duan Jin as a Treatment for Physical Ailments: A Bibliography of Recent Medical Research, Fayetteville State University, Broadwell College of Business and Economics, *Studies in the Economics of Qigong, No. 3*, August 31, 2020. Robert W. McGee. <https://ssrn.com/abstract=3685571>
- 4 Wu Qin Xi as a Treatment for Physical Ailments: A Bibliography of Recent Medical Research, Fayetteville State University, Broadwell College of Business and Economics, *Studies in the Economics of Qigong, No. 4*, August 31, 2020. Robert W. McGee. <https://ssrn.com/abstract=3685575>
- 5 The Use of Yi Jin Jing to Treat Illness: A Summary of Three Studies, Fayetteville State University, Broadwell College of Business and Economics, *Studies in the Economics of Qigong, No. 5*, August 31, 2020. Robert W. McGee. <https://ssrn.com/abstract=3685577>
- 6 Qigong and the Treatment and Prevention of COVID-19, Fayetteville State University, Broadwell College of Business and Economics, *Studies in the Economics of Qigong, No. 6*, September 4. Robert W. McGee. <https://ssrn.com/abstract=3686381>
- 7 Qigong and the Treatment and Prevention of Cancer, Fayetteville State University, Broadwell College of Business and Economics, *Studies in the Economics of Qigong, No. 7*, September 14. Robert W. McGee. <https://ssrn.com/abstract=3692125>
- 8 McGee, Robert W. 2021. Tai Chi, Qigong and Transgender Health. Fayetteville State University, Broadwell College of Business and Economics, *Studies in the Economics of Tai Chi and Qigong, No. 8*, April 16. DOI: [10.13140/RG.2.2.32202.90567](https://doi.org/10.13140/RG.2.2.32202.90567)
- 9 McGee, Robert W. 2025. Qigong and the Treatment and Prevention of Cancer (Updated), Fayetteville State University, Broadwell College of Business and

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