


Diagnostik und Therapie primärer und metastasierter Mammakarzinome

Komplementäre Therapie „Survivorship“



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Komplementäre Therapien Hormontherapie „Survivorship“ (Rezidiv-Prävention)

▪

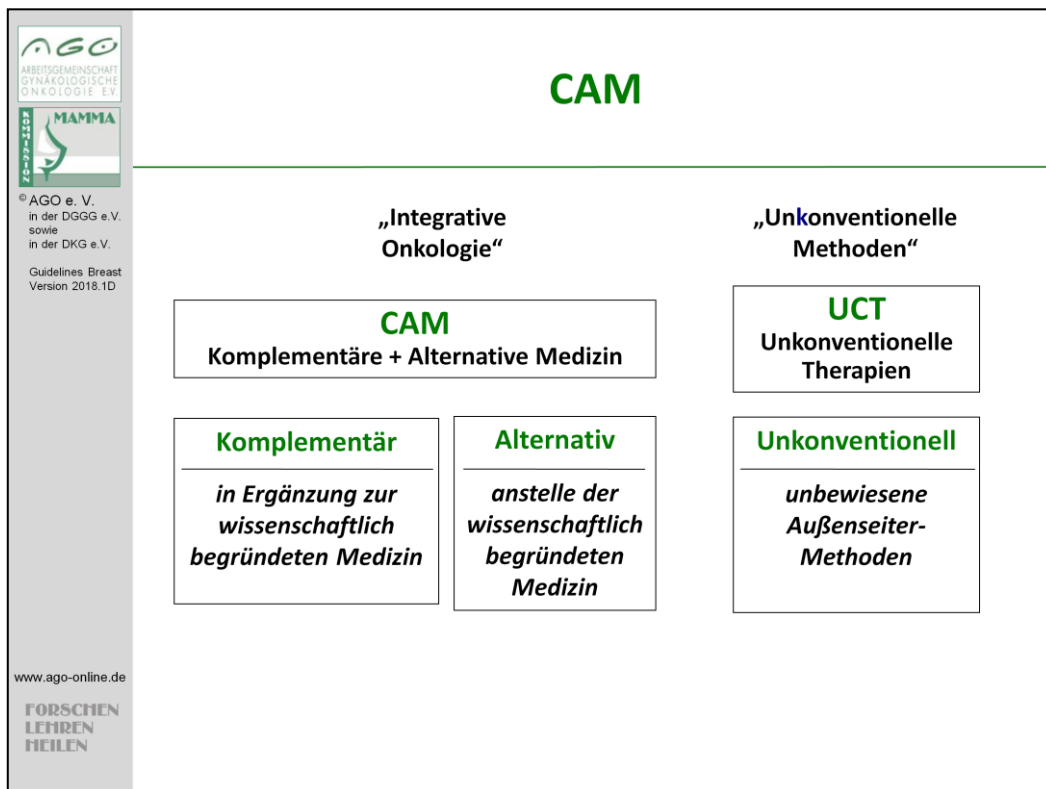
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Version 2018:
Kümmel / Hanf

Screened Data Sources:

Pubmed	2012 - 01/2018
ASCO	2015 – 2016
SABCS	2015 – 2017
EBCC	2015 – 2016
Cochrane library:	summary Jan. 2018:




Komplementäre Verfahren werden parallel zur konventionellen Therapie angewendet und unterscheiden sich von alternativen Verfahren dadurch, dass sie den Wert der konventionellen Verfahren nicht in Frage stellen, sondern sich als Ergänzung verstehen


Onkoleitlinienprogramm

1. Witt CM et al.. A Comprehensive Definition for Integrative Oncology. J Natl Cancer Inst Monogr (2017) 2017(52): lgx012

“Integrative oncology is a patient-centered, evidence-informed field of cancer care that utilizes mind and body practices, natural products, and/or lifestyle modifications from different traditions alongside conventional cancer treatments. Integrative oncology aims to optimize health, quality of life, and clinical outcomes across the cancer care continuum and to empower people to prevent cancer and become active participants before, during, and beyond cancer treatment.”



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Allgemein

	Oxford		
	LoE	GR	AGO
▪ CAM anstelle lokoregionärer Interventionen	2b	B	--
▪ CAM anstelle systemischer Therapie	2b	B	--
• Patienten sollten nach ihrer Nutzung von komplementären und alternativen Therapien befragt werden.			
▪ <i>Unter Systemtherapie:</i> Besondere Beachtung gilt möglichen Medikamenteninteraktionen			

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1. Saquib J, Parker BA, Natarajan L, et al. Prognosis following the use of complementary and alternative medicine in women diagnosed with breast cancer. Complement Ther Med. 2012 Oct;20(5):283-90. doi: 10.1016/j.ctim.2012.04.002. Epub 2012 Apr 27.
2. Guha N, Kwan ML, Quesenberry CP, et al: Soy isoflavones and risk of cancer recurrence in a cohort of breast cancer survivors: the Life After Cancer Epidemiology study. Breast Cancer Res Treat. 2009;118(2):395-405, pmid:19221874.
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4. Fremd C et al.. Use of complementary and integrative medicine among German breast cancer patients: predictors and implications for patient care within the PRAEGNANT study network. Arch Gynecol Obstet. 2017 May;295(5):1239-1245. doi: 10.1007/s00404-017-4348-2. Epub 2017 Mar 22.
5. Samuels N et al.. Unmonitored use of herbal medicine by patients with breast cancer: reframing expectations. J Cancer Res Clin Oncol (2017) 143:2267-2273
6. Smith PJ et al.. Complementary and alternative medicine use by patients receiving curative-intent chemotherapy. Asia-Pacific Journal of Clinical Oncology 2016; 12: 265-274
7. Greenlee H et al.. Association Between Complementary and Alternative Medicine Use and Breast Cancer Chemotherapy Initiation: The Breast Cancer Quality of Care (BQUAL) Study. JAMA Oncol. 2016 Sep 1;2(9):1170-6. doi: 10.1001/jamaoncol.2016.0685

Komplementäre Therapien prä- und postoperativ

	Oxford		
	LoE	GR	AGO
Präoperativ			
▪ Hypnose (reduziert Ängste, Schmerz, Übelkeit)	1b	B	+
Postoperativ			
▪ Akupunktur			
▪ bei Schmerzen, Ängstlichkeit	1b	B	+/-
▪ bei Übelkeit, Erbrechen	2b	B	+
▪ Massage Therapie (bei Schmerzen)	2b	C	+/-
▪ Frühzeitige postoperative Bewegungstherapie beugt Dysfunktion der oberen Extremität vor CAVE: vermehrt Wundsekret	1a	A	+
▪ Prophylaktische Lymphdrainage	1b	B	-

Hypnosis

1. Cramer H, Lauche R, Paul A, et al: Hypnosis in Breast Cancer Care: A Systematic Review of Randomized Controlled Trials. Integr Cancer Ther. 2015 Jan;14(1):5-15. Epub 2014 Sep 18.
2. Montgomery GH, David D, Kangas M, et al. (2014) Randomized Controlled Trial of a Cognitive-Behavioral Therapy Plus Hypnosis Intervention to Control Fatigue in Patients Undergoing Radiotherapy for Breast Cancer. JCO DOI 10.12007JCO.2013.49.3437
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5. Montgomery GH, Schnur JB, Kravits K. Hypnosis for cancer care: Over 200 years young. CA Cancer J Clin. 2012 Nov 20. doi: 10.3322/caac.21165.

Acupuncture and Postoperative Nausea and Vomiting / Pain

1. Mallory MJ et al.: Acupuncture in the postoperative setting for breast cancer patients: a feasibility study. Am J Chin Med. 2015;43(1):45-56.
2. Chao LF et al.: The efficacy of acupoint stimulation for the management of therapy-related adverse events in patients with breast cancer: a systematic review. Breast Cancer Res Treat (2009) 118:255–267.
3. Quinlan-Woodward J, Gode A, Dusek JA: Assessing the Impact of Acupuncture on Pain, Nausea, Anxiety, and Coping in Women Undergoing a Mastectomy. Oncol

Nurs Forum. 2016 Nov 1;43(6):725-732.

4. Giron PS, Haddad CA, Lopes de Almeida: Effectiveness of acupuncture in rehabilitation of physical and functional disorders of women undergoing breast cancer surgery. *Support Care Cancer*. 2016 Jun;24(6):2491-6.
5. Chiu HY, Hsieh YJ, Tsai PS. Systematic review and meta-analysis of acupuncture to reduce cancer-related pain. *Eur J Cancer Care (Engl)*. 2017 Mar;26(2). doi: 10.1111/ecc.12457. Epub 2016 Feb 7

Massage Therapy


1. Lee SH, Kim JY, Yeo S et al: Meta-Analysis of Massage Therapy on Cancer Pain. *Integr Cancer Ther*. 2015 Jul;14(4):297-304.
2. Pan YQ, Yang KH, Wang YL, et al: Massage interventions and treatment-related side effects of breast cancer: a systematic review and meta-analysis. *Int J Clin Oncol*. 2014 Oct;19(5):829-41.

Postoperative exercise

1. De Groef A, Van Kampen M, Dieltjens E, et al. Effectiveness of postoperative physical therapy for upper-limb impairments after breast cancer treatment: a systematic review. *Arch Phys Med Rehabil*. 2015 Jun;96(6):1140-53. doi: 10.1016/j.apmr.2015.01.006. Epub 2015 Jan 13. Review.
2. McNeely ML, Campbell K, Ospina M et al.: Exercise interventions for upper-limb dysfunction due to breast cancer treatment. *Cochrane Database of Systematic Reviews* 2010, Issue 6. Art. No.: CD005211. DOI: 10.1002/14651858.CD005211.pub2.
3. Cavanaugh KM.: Effects of Early Exercise on the Development of Lymphedema in Patients With Breast Cancer Treated With Axillary Lymph Node Dissection. *J Oncol Pract*. 2011 March; 7(2): 89–93.
4. Anderson RT, Kimmick GG, McCoy TP, et al. A randomized trial of exercise on well-being and function following breast cancer surgery: the RESTORE trial. *J Cancer Surv* 2012;6(2):172-81

Prophylactic lymph drainage

1. Devoogdt N, Christiaens MR, Geraerts I, et al: Effect of manual lymph drainage in addition to guidelines and exercise therapy on arm lymphoedema related to breast cancer: randomised controlled trial. *BMJ* 2011;343:d5326 doi: 10.1136/bmj.d5326
2. Li L, Yuan L, Chen X: Current Treatments for Breast Cancer-Related Lymphoedema: A Systematic Review. *Asian Pac J Cancer Prev*. 2016 Nov 1;17(11):4875-4883.



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Komplementäre Therapien

Behandlungsphase – Einfluss auf Toxizität I

Bei laufender onkologischer Standardtherapie:

CAVE: Medikamenten-Interaktionen!

		Oxford		
		LoE	GR	AGO
▪ Mistellektine (Viscum album)	zur Reduktion von therapieassoziierten Nebenwirkungen	1a	B	+/-
▪ Thymuspeptide	verringern Risiko schwerer Infektionen	2a	B	+/-
▪ Ginseng	verringert Krebs-assoziierte Fatigue; inhibiert u.a. Cytochrom P Enzyme, z.B. CYP3A4)	2b	C	-
▪ Ganoderma Lucidum	Besserung der Fatigue; Cave: inhibiert P Enzyme, z.B. CYP3A4)	2b	C	-
▪ L-Carnitin	Prävention der Toxizität, Verbesserung periphere Neuropathie	1b	B	--
	Verbesserung der Fatigue	1b	B	-
▪ Curcumin	um Radiodermatitis zu vermindern	1b	B	+/-
▪ Ingwer	komplementär zu Leitlinien-gerechter Medikation gegen Chemotherapie induzierte Übelkeit/Erbrechen;	1b	C	+/-
	Cave: Wechselwirkungen			

General

- Li Y, Wang J, Lin F: A Methodology for Cancer Therapeutics by Systems Pharmacology-Based Analysis: A Case Study on Breast Cancer-Related Traditional Chinese Medicines. PLoS One. 2017 Jan 9;12(1):e0169363.
- Farahmand L, Darvishi B, Majidzadeh-A K: Naturally occurring compounds acting as potent anti-metastatic agents and their suppressing effects on Hedgehog and WNT/ β -catenin signalling pathways. Cell Prolif. 2017 Feb;50(1). doi: 10.1111/cpr.12299.
- Cramer H, Lauche R, Klose P: Yoga for improving health-related quality of life, mental health and cancer-related symptoms in women diagnosed with breast cancer. Cochrane Database Syst Rev. 2017 Jan 3;1:CD010802.
- Neuhouser ML, Smith AW, George SM: Use of complementary and alternative medicine and breast cancer survival in the Health, Eating, Activity, and Lifestyle Study. Breast Cancer Res Treat. 2016 Dec;160(3):539-546.

Mistletoe

- Marvibaigi M, Supriyanto E, Amini N, et al: Preclinical and clinical effects of mistletoe against breast cancer. BioMed research international 2014;2014:785479.
- Shneerson C, Taskila T, Gale N, et al: 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 2013;21:417-429.
- Troger W, Zdrade Z, Stankovic N, et al: Five-year follow-up of patients with early stage breast cancer after a randomized study comparing additional treatment

with viscum album (l.) extract to chemotherapy alone. Breast cancer : basic and clinical research 2012;6:173-180.

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5. Weissenstein U, Kunz M, Urech K, et al: Interaction of standardized mistletoe (viscum album) extracts with chemotherapeutic drugs regarding cytostatic and cytotoxic effects in vitro. BMC complementary and alternative medicine 2014;14:6.

Thymus

1. Wolf E, Milazzo S, Boehm K, et al. Thymic peptides for treatment of cancer patients. Cochrane Database of Systematic Reviews 2012, Issue 2. Art. No.: CD003993. DOI: 10.1002/14651858.CD003993.pub3.

Ginseng, Ganoderma lucidum

1. Leggett S1, Koczwara B, Miller M. The impact of complementary and alternative medicines on cancer symptoms, treatment side effects, quality of life, and survival in women with breast cancer--a systematic review. Nutr Cancer. 2015;67(3):373-91.
2. Bao, P. P., W. Lu, Y. Cui, Y et al(2012). "Ginseng and Ganoderma lucidum use after breast cancer diagnosis and quality of life: a report from the Shanghai Breast Cancer Survival Study." PLoS One 7(6): e39343.
3. Jin X, Ruiz Beguerie J, Sze Daniel M-y et al: Ganoderma lucidum (reishi mushroom) for cancer treatment. Cochrane Database of Systematic Reviews 2012
4. JL Ryan et al.: Ginger (Zingiber officinale) reduces acute chemotherapy-induced nausea: a URCC CCOP study of 576 patients. Support Care Cancer 2012;20(7):1479-89
5. Karimi N, Roshan VD: Change in adiponectin and oxidative stress after modifiable lifestyle interventions in breast cancer cases. Asian Pacific journal of cancer prevention : APJCP 2013;14:2845-2850.

L-Carnitine

1. Hershman DL, Unger JM, Crew K et al.: Randomized double-blind placebo-controlled trial of acetyl-L-carnitine for the prevention of taxane-induced neuropathy in women undergoing adjuvant breast cancer therapy. J Clin Oncol. 2013 Jul 10;31(20):2627-33
2. Cruciani RA, Zhang JJ, Manola J et al. L-carnitine supplementation for the management of fatigue in patients with cancer: an eastern cooperative oncology group phase III, randomized, double-blind, placebo-controlled trial. J Clin Oncol. 2012 Nov 1;30(31):3864-9

Curcumin

1. Ryan, J. L., C. E. Heckler, M. Ling, et al (2013). "Curcumin for radiation dermatitis: a randomized, double-blind, placebo-controlled clinical trial of thirty breast

cancer patients." Radiat Res 180(1): 34-43.

2. Kumar P, Kadakol A, Shashtrula P, et al: Curcumin as an adjuvant to breast cancer treatment. Anti-cancer agents in medicinal chemistry 2015
3. Bandyopadhyay D: Farmer to pharmacist: Curcumin as an anti-invasive and antimetastatic agent for the treatment of cancer. Frontiers in chemistry 2014;2:113.

Ingwer

1. Thamlikitkul L, Srimuninnimit V, Akewanlop C, et al. Efficacy of ginger for prophylaxis of chemotherapy-induced nausea and vomiting in breast cancer patients receiving adriamycin-cyclophosphamide regimen: a randomized, double-blind, placebo-controlled, crossover study. Support Care Cancer. 2017 Feb;25(2):459-464. doi: 10.1007/s00520-016-3423-8. Epub 2016 Oct 6.
2. Sanaati F, Najafi S, Kashaninia Z, et al. Effect of Ginger and Chamomile on Nausea and Vomiting Caused by Chemotherapy in Iranian Women with Breast Cancer. Asian Pac J Cancer Prev. 2016;17(8):4125-9.

Komplementäre Therapien Behandlungsphase – Einfluss auf Toxizität II

	Oxford		
	LoE	GR	AGO
▪ Antioxidanzien (Suppl.)	1b	B	-
▪ verschied. Antioxidative Extrakte zur Minderung anthrazyklinbedingter Cardiotoxizität	2b	B	+/-
▪ Hochdosiert Vitamin C *	1b	C	-
▪ Vitamin E	2b	D	-
▪ Selen zur Linderung der Nebenwirkungen	1b	B	-
▪ Co-Enzym Q 10 (Fatigue, Lebensqualität)	1b	B	-
▪ Proteolytische Enzyme (gegen Chemotherapie-induzierte Toxizität)	3b	B	-
▪ Verbesserung der Wundheilung durch Chinesische Medizin	1b	B	-*inf
▪ Sauerstoff- und Ozon-Therapie	5	D	--

Infusion in Dtl. nicht geprüfter Substanzen

* **Studienteilnahme empfohlen**

General

1. Zhu L, Li L, Li Y: Chinese Herbal Medicine as an Adjunctive Therapy for Breast Cancer: A Systematic Review and Meta-Analysis. Evid Based Complement Alternat Med. 2016;2016:9469276. doi: 10.1155/2016/9469276.
2. McPherson L, Cochrane S, Zhu X: Current Usage of Traditional Chinese Medicine in the Management of Breast Cancer: A Practitioner's Perspective. Integr Cancer Ther. 2016 Sep;15(3):335-42. doi: 10.1177/1534735415607656.

Antioxidant supplements

1. Greenlee H, Hershman DL, Jacobson JS: Use of antioxidant supplements during breast cancer treatment: a comprehensive review. Breast Cancer Res Treat. 2009 Jun;115(3):437-52.
2. S.-K. Myung, Y. Kim, W. Ju et al.: Effects of antioxidant supplements on cancer prevention: meta-analysis of randomized controlled trials. Annals of Oncology 21: 166–179, 2010.
3. Harvie M: Nutritional supplements and cancer: Potential benefits and proven harms. American Society of Clinical Oncology educational book / ASCO American Society of Clinical Oncology Meeting 2014:e478-486.
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5. The Protective Role of Phenolic Compounds Against Doxorubicin-induced Cardiotoxicity: A Comprehensive Review. Razavi-Azarkhiavi K, Iranshahy M, Sahebkar A, et al. Nutr Cancer. 2016 Aug-Sep;68(6):892-917. doi:

- 10.1080/01635581.2016.1187280. Epub 2016 Jun 24. Review
6. Drugs R D. 2012 Jun 1;12(2):101-6. doi: 10.2165/11632530-000000000-00000. Protective effects of salidroside on epirubicin-induced early left ventricular regional systolic dysfunction in patients with breast cancer.
 7. Zhang H1, Shen WS, Gao CH, et al.

Vitamin C

1. Ohno S, Ohno Y, Suzuki N et al.: High-dose Vitamin C (Ascorbic Acid) Therapy in the Treatment of Patients with Advanced Cancer. *Anticancer Res.* 2009 Mar; 29(3):809-15. Review.
2. Heaney M, Gardner J, Karasavvas N et al.: Vitamin C antagonizes the cytotoxic effects of antineoplastic drugs. *Cancer Res.* 2008 Oct 1;68(19):8031-8.
3. PLoS One. 2015 Apr 7;10(4):e0120228. doi: 10.1371/journal.pone.0120228. eCollection 2015. High-dose intravenous vitamin C combined with cytotoxic chemotherapy in patients with advanced cancer: a phase I-II clinical trial. Hoffer LJ1, Robitaille L2, Zakarian R3, et al..
4. *Sci Transl Med.* 2014 Feb 5;6(222):222ra18. doi: 10.1126/scitranslmed.3007154. High-dose parenteral ascorbate enhanced chemosensitivity of ovarian cancer and reduced toxicity of chemotherapy. Ma Y1, Chapman J, Levine M, et al.

Selen

1. Dennert G, Horneber M. Selenium for alleviating the side effects of chemotherapy, radiotherapy and surgery in cancer patients. *Cochrane Database of Systematic Reviews* 2010, Issue 11. Art. No.: CD005037. DOI: 10.1002/14651858.CD005037.pub2.
2. Greenlee H, Hershman DL, Jacobson JS: Use of antioxidant supplements during breast cancer treatment: a comprehensive review. *Breast Cancer Res Treat.* 2009 Jun;115(3):437-52.

Coenzyme Q10

1. Lesser GJ, Case D, Stark N, et al. A randomized, double-blind, placebo-controlled study of oral coenzyme Q10 to relieve self-reported treatment-related fatigue in newly diagnosed patients with breast cancer. *J Support Oncol* 2013;11(1):31-42
2. Lockwood K et al.: Partial and complete regression of breast cancer in patients in relation to dosage of coenzyme Q10. *Biochem Biophys Res Comm* 1994;199:1504-8.
3. Lockwood K et al.: Progress on therapy of breast cancer with vitamin Q10 and the regression of metastasis. *Biochem Biophys Res Comm* 1995;212:172-7.
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Proteolytic enzymes and toxicity of chemotherapy


1. Petru U, Stranz B, Petru C: Effects of proteolytic enzyme therapy with Wobe Mugos against chemotherapy-induced toxicity in breast cancer patients - results of a pilot study Wien Med Wochenschr. 2010 Nov;160(19-20):513-6.

Bromelain

1. Hidaka M, Nagata M, Kawano Y, et al.: Inhibitory effects of fruit juices on cytochrome P450 2C9 activity in vitro. Biosci Biotechnol Biochem. Feb 2008;72(2):406-411.

Chinese herbal medicine and wound healing

1. Chen J, Lv Q, Yu M et al.: Randomized clinical trial of Chinese herbal medications to reduce wound complications after mastectomy for breast carcinoma. Br J Surg. 2010 Dec;97(12):1798-804



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Komplementäre Therapien unter (Chemo)therapie Behandlung von Nebenwirkungen

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- **Chinesische Kräutermedizin zur Behandlung chemotherapiebedingter Nebenwirkungen**
- **Homöopathische Medizin gegen therapiebedingte Nebenwirkungen**
 - Topische Calendula (>=20% Calendulaanteil) zur Prophylaxe einer akuten Dermatitis unter Strahlentherapie
 - Traumeel S® Mundspülung bei chemotherapieinduzierter Stomatitis
- **Topische Anwendung Silymarin (Silybin) (Mariendisteleextrakt)**
- **Massage zur Verbesserung von Fatigue, Schmerzen, Angst, Übelkeit**
- **Transkutane elektrische Nervenstimulation (TENS) bei Karzinomschmerzen**

Oxford		
LoE	GR	AGO
1b	B	-
1b	B	+/-
3a	B	+/-
1b	C	+/-
2b	D	+/-

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1. Chinese medicinal herbs

Zhu L, Li L, Li Y: Chinese Herbal Medicine as an Adjunctive Therapy for Breast Cancer: A Systematic Review and Meta-Analysis. Evid Based Complement Alternat Med. 2016;2016:9469276. doi: 10.1155/2016/9469276.

2. Zhang M, Liu X, Li J, et al. Chinese medicinal herbs to treat the side-effects of chemotherapy in breast cancer patients. Cochrane Database of Systematic Reviews 2007, Issue 2. Art. No.: CD004921. DOI: 10.1002/14651858.CD004921.pub2

1. Homeopathic medicines for adverse effects of cancer treatments

Kassab S, Cummings M, Berkovitz S, et al. Homeopathic medicines for adverse effects of cancer treatments. Cochrane Database of Systematic Reviews 2012, Issue 8. Art. No.: CD004845. DOI: 10.1002/14651858.CD004845.pub2.

Topical use of Silymarin

1. M. Becker-Schiebe et al.: Topical Use of a Silymarin-Based Preparation to Prevent Radiodermatitis. Strahlenther Onkol 2011;187:485–91.
2. Lazzeroni M, Guerrieri-Gonzaga A, Gandini S: A Presurgical Study of Oral Silybin-Phosphatidylcholine in Patients with Early Breast Cancer. Cancer Prev Res (Phila). 2016 Jan;9(1):89-95. doi: 10.1158/1940-6207.

Massage


1. Shin ES, Seo KH, Lee SH, et al. Massage with or without aromatherapy for symptom relief in people with cancer. Cochrane Database of Systematic Reviews

2016, Issue 6. Art. No.: CD009873. DOI: 10.1002/14651858.CD009873.pub3.


2. Robison JG, Smith CL. Therapeutic Massage During Chemotherapy and/or Biotherapy Infusions: Patient Perceptions of Pain, Fatigue, Nausea, Anxiety, and Satisfaction. Clin J Oncol Nurs. 2016 Apr;20(2):E34-40. doi: 10.1188/16.CJON.E34-E40.

Transcutaneous electric nerve stimulation (TENS) for cancer pain in adults: (von Slide 16 übertragen)

1. Hurlow A, Bennett MI, Robb KA, et al. Transcutaneous electric nerve stimulation (TENS) for cancer pain in adults. Cochrane Database of Systematic Reviews 2012, Issue 3. Art. No.: CD006276. DOI: 10.1002/14651858.CD006276.pub3.
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Komplementäre Therapien unter (Chemo)therapie Behandlung von Nebenwirkungen

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	Oxford LoE	GR	AGO
▪ Akupunktur zur Verbesserung von:			
▪ Elektro-Akupunktur als Ergänzung zu antiemetischer Therapie bei Chemotherapie-induzierter Übelkeit und Erbrechen	1b	B	+
▪ Schmerzen			
▪ Krebs-Schmerzen	1b	B	+
▪ AI-induzierte Arthralgie	1a	B	+
▪ TENS - transkutane elektrische Nervenstimulation bei Krebs-Schmerzen	2b	D	+/-
▪ Fatigue	1a	B	+
▪ Akupressur zur Verbesserung von:			
▪ Übelkeit, Erbrechen ergänzend zu Antiemetika	1b	B	+
▪ Fatigue	1b	B	+
▪ Kognitiver Dysfunktion	5	D	+/-
▪ Menopausensyndrom bei Patientinnen mit Mammakarzinom	1b	B	+
▪ zur Verbesserung v. Häufigkeit und Schwere d. Hitzewallungen	1b	B	+/-
▪ Elektroakupunktur zur Verbesserung des Schlafs bei Hitzewallungen	2a	B	+
▪ Leukopenie (Moxibustion)	2b	B	+/-
▪ Chemotherapie-induzierter Polyneuropathie			
▪ als Prophylaxe	1b	B	-
▪ als Therapie	2b	B	+/-
▪ Chronisches Lymphödem nach MaCa Therapie	2b	B	+/-

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Acupuncture

1. Wu X, Chung VCh, Hui EP, et al: Effectiveness of acupuncture and related therapies for palliative care of cancer: overview of systematic reviews. Sci Rep. 2015 Nov 26;5:16776.
2. Tao WW, Jiang H, Tao XM, et al. 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):728-47. doi: 10.1016/j.jpainsymman.2015.11.027. Epub 2016 Feb 12. Review.
3. Lau CH, Wu X, Chung VC, et al. Acupuncture and Related Therapies for Symptom Management in Palliative Cancer Care: Systematic Review and Meta-Analysis. Medicine (Baltimore). 2016 Mar;95(9):e2901. doi: 10.1097/MD.0000000000002901.

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Komplementäre Therapien

Behandlungsphase – Mind-Body Medizin I

MBSR (Mindfulness-Based Stress Reduction –

dt. Achtsamkeits-basierte Stressbewältigung) Programm verbessert Lebensqualität, Bewältigungsstrategien, Achtsamkeit, vermindert Stress, Angst, Depression, Fatigue und Schlafstörung

Oxford		
LoE	GR	AGO

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Körperliches Training / Sport

mind. 150 Min. moderates Ausdauertraining pro Woche in Kombination mit kräftigendem Gerätetraining (2x /Wo.) verbessern Lebensqualität, kardiorespiratorische Fitness, körperliche Leistungsfähigkeit, Schlaf und Fatigue, kein höheres Risiko für die Entstehung von Lymphödemen

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<div>  <div> Komplementäre Therapien Behandlungsphase – Mind-Body Medizin II </div> </div>			
	Oxford		
	LoE	GR	AGO
Yoga Verbesserung von Lebensqualität, Stress, Fatigue, Schlaf, Angst und Depression	1b	A	+
Qigong Verbesserung von Lebensqualität, Fatigue, Stimmung	2a	B	+/-
Tai-Chi Verbesserung von Lebensqualität, Muskelkraft, Schlaf	2a	B	+/-
Hypnose (in Kombination mit kognitiver Therapie) Verbesserung von Fatigue unter Radiotherapie, Reduktion von Distress	1b	A	+

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General

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Komplementäre Therapien

Rezidivprävention / Verbesserung Gesamtüberleben I

Beeinflussbare Lebensstilfaktoren – Sport - Genussmittel

	Oxford		
	LoE	GR	AGO
<ul style="list-style-type: none"> Körperliches Training / Sport (das Äquivalent zu 3-5 Std. mäßiggradigem „Walking“ verbessert DFS und OS und kardiopulmonale Funktion) Nikotinabusus Alkohol (>6 g/die) 	2a	A	++
	2b	A	+/-
	2b	A	+/-

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ARBEITSGEMEINSCHAFT
GYNAKOLOGISCHE
ONKOLOGIE e.V.

MAMMA

Komplementäre Therapien

Rezidivprävention / Verbesserung Gesamtüberleben II

Beeinflussbare Lebensstilfaktoren – Ernährung

© AGO e. V.
in der DGGG e.V.
sowie
in der DKG e.V.

Guidelines Breast
Version 2018.1D

- **Anstreben eines normalen BMI**
- **Ernährung mit geringem Fettanteil**
(Ernährungsberatung empfohlen)
- **Ballaststoffhaltige Lebensmittel**
(u.a. Saaten z.B. Leinsamen)
- **Beachten genereller Ernährungsempfehlungen**
(z.B. von DGE, WCRF) im Sinne einer mediterranen
(Vollwert-) Ernährung
- **Diät-Extreme**

Oxford		
LoE	GR	AGO
1a	A	++
1a	B	+
2a	B	+
2a	B	++
2a	B	--

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FORSCHEN
LEHREN
HEILEN

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Komplementäre Therapien Rezidivprävention / Verbesserung Gesamtüberleben III Pflanzliche Therapieansätze - Nahrungsergänzung

	Oxford		
	LoE	GR	AGO
▪ Nach Systemtherapie – Vitamine/Antioxidanzien scheinen nicht mit einem erhöhtem Rezidivrisiko assoziiert	2b	B	
▪ Raucher haben ein höheres Bronchial-Ca-Risiko unter Antioxidanzien	1b	A	
Prävention eines brustkrebsassoz. Rezidivs			
▪ Antioxidanzien	2a	B	+/-
▪ Orthomolekulare Substanzen (Selen, Zink ...)	5	D	-
▪ Vitamine (zusätzlich zu ausgewogener Ernährung; Vit. C, E, D)	2a	B	+/-
▪ Karotenoide erscheinen mit schlechterem Ergebnis assoziiert	2b	B	-
▪ Proteolytische Enzyme (Papain, Trypsin, Chymotrypsin)	3b	B	-
▪ Sojaprodukte (Phytoöstrogene)	2a	B	+/-
– Konzentration ≥ 100 mg Isoflavone pro Tag	2a	B	-
▪ Traubensilberkerze (Cimicifuga racemosa)	3b	C	+/-
▪ Mistellektine (Viscum album)	1b	C	-
▪ Thymuspeptide (Einfluss auf Überleben)	2a	B	-
▪ Sauerstoff- und Ozon-Therapie	5	D	--
▪ Antioxidative Supplemente nach Beendigung der Radiotherapie	2b	B	+/-
▪ Laetrile (Aprikosenkernextrakt)	1c	D	--
▪ Methadon	5	D	--
▪ Cancer bush (Sutherlandia frutescens), Devil's claw (Harpagophytum procumbens), Rooibos Tee (Aspalathus linearis), Bambara-Erdnuss (Vigna subterranean)	5	D	-

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