

Diagnosis and Treatment of Patients with early and advanced Breast Cancer



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Complementary Therapy Survivorship

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Complementary Therapy – Hormonal Treatment and Alternatives in Breast Cancer Survivors – Survivorship

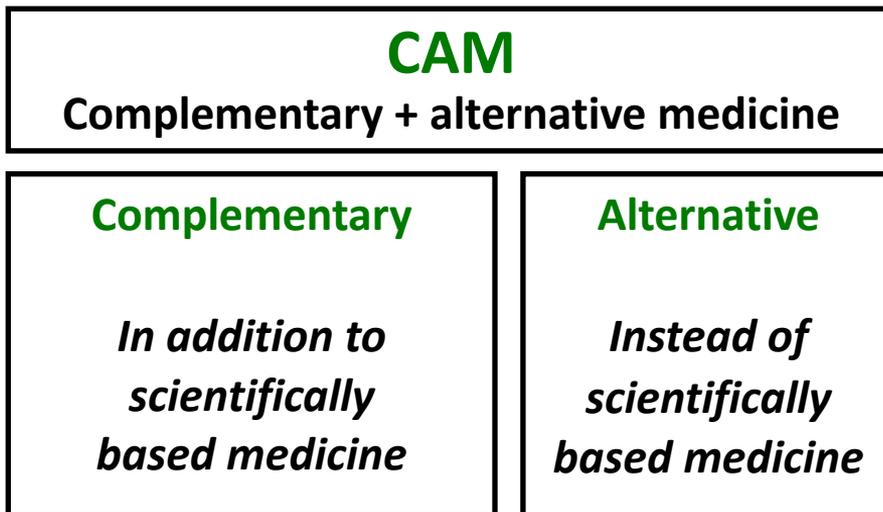
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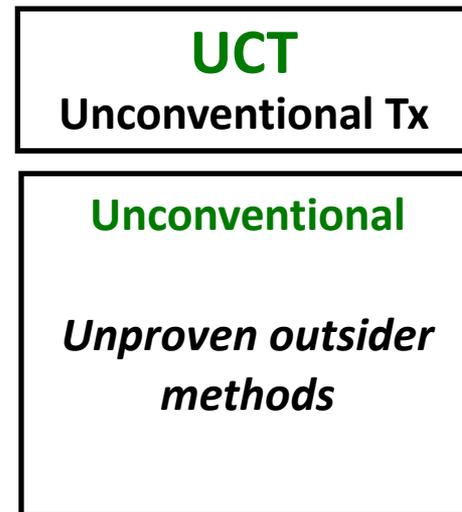
- **Versions 2002–2020:**
Albert / Bauerfeind / Blohmer / Fersis / Friedrich / Gerber / Göhring / Hanf / Janni / Kümmel / Lück / von Minckwitz / Nitz / Oberhoff / Rhiem / Scharl / Schmidt / Schütz / Thomssen / Kümmel / Schütz
- **Version 2021:**
Dall / Solomayer

CAM

„Integrative Oncology“



„Unconventional methods“



Good clinical practice

- **All patients should be asked as early as possible and repeatedly during the course of the process regarding the interest in information complementary medical measures and, if interested, reliable sources of information should be referred.**

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General Considerations

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- **CAM instead of loco-regional interventions**
- **CAM instead of systemic treatment**
- **Patients should be asked and advised about their use of CAM modalities**
- **Diagnostic procedures in connection with complementary and alternative therapy concepts without evidence (e.g. iris diagnostics, bioresonance) should not be recommended.**
- ***During anti-cancer treatment: Beware of drug interactions***

Oxford		
LoE	GR	AGO
2b	B	--
2b	B	--

Complementary Therapy

Pre- and Postoperative

Oxford

LoE GR AGO

Preoperative:

- Hypnosis (reduces anxiety, pain, nausea)

1b B +

Postoperative:

- Acupuncture (pain relief, anxiety)

1b B +/-

- Acupuncture (nausea, vomiting)

2b B +

- Massage therapy (pain relief)

2b C +/-

- Early postoperative exercise reduces upper-limb dysfunction (beware: increased wound drainage)

1a A +

- Physical exercise

- to reduce breast cancer related secondary lymphedema

1a A +

- as a prophylaxis of lymph edema

1b B +/-

- Prophylactic lymphatic drainage

1b B --

- Yoga (arm and shoulder pain)

2b C +

- Music therapy (reduces pain after mastectomy)

2b C +/-



Complementary Treatment While on Cancer Treatment – Impact on Toxicity I

During anti-cancer treatment: Beware of drug interactions

- **Mistletoe (*Viscum album*)**
in order to reduce side effects
- **Thymic peptides**
lower risk of severe infections
- **Ginseng**
in order to reduce cancer related fatigue; note: interacts with cytochrome P enzymes e.g. CYP 3A4
- **Ganoderma Lucidum**
may improve fatigue, note: inhibits cytochrome P enzymes (e.g. CYP 3A4)
- **L-Carnitine**
 - given for prevention of toxicity; however, increased chemotherapy-induced peripheral neuropathy
 - Improvement of cancer related fatigue
- **Curcumin**
adjunct to reduce radiation-induced dermatitis
- **Ginger**
adjunct to guideline-oriented medication to treat chemotherapy induced nausea & vomiting – beware of drug interactions

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

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Complementary Treatment While on Cancer Treatment – Impact on Toxicity II

Oxford

	LoE	GR	AGO
<ul style="list-style-type: none"> ▪ Antioxidant supplements <ul style="list-style-type: none"> ▪ various antioxidative extracts to reduce anthracyclin-induced cardiotoxicity 	1b	B	-
	2b	B	+/-
▪ High dose vitamine C	1b	C	-
▪ Vitamine E	2b	D	-
▪ Selenium for alleviating therapy side effects	1b	B	-
▪ Co-Enzyme Q 10 (fatigue, QoL)	1b	B	-
▪ Proteolytic enzymes for reduction of chemotherapy-induced toxicity	3b	B	-
▪ Chinese herbal medicine improves wound healing	1b	B	-*inf
▪ Oxygen and ozone therapy	5	D	--
▪ Short-term fasting (QoI, Fatigue)	3b	C	+/-*

inf: i.v.-infusion (in Germany not approved)

* **treatment in clinical trials recommended**

Additional Complementary Therapy of Side Effects Related to Cancer Treatments

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	Oxford		
	LoE	GR	AGO
▪ Chinese medicinal herbs to treat the chemotherapy side effects in breast cancer patients	1b	B	-
▪ Homoeopathic medicine against therapy side effects	1b	B	+/-
▪ Topical Silymarin for prophylaxis of acute dermatitis during radiotherapy	3a	B	+/-
▪ Massage to improve on fatigue, pain, anxiety, nausea	1b	C	+/-
▪ Transcutaneous Electrical Nerve stimulation (TENS) against cancer pain	2b	D	+/-
▪ Hydrotherapy	3b	C	+/-

Additional Complementary Therapy of Side Effects Related to Cancer Treatments

Oxford		
LoE	GR	AGO

Acupuncture in order to improve on

<ul style="list-style-type: none"> ▪ Chemotherapy-induced nausea and vomiting <ul style="list-style-type: none"> ▪ (Electro)-Acupuncture as adjunct to antiemetic treatment ▪ Acupressure as adjunct to antiemetic treatment 	1b	B	+
	1b	B	+
<ul style="list-style-type: none"> ▪ Pain <ul style="list-style-type: none"> ▪ Cancer pain ▪ Aromatase-inhibitor – induced arthralgia ▪ TENS – Transcutaneous Electrical Nerve Stimulation to relieve cancer pain 	1b	B	+
	1a	B	+
	2b	D	+/-
<ul style="list-style-type: none"> ▪ Fatigue <ul style="list-style-type: none"> ▪ Acupressure 	1a	B	+
	1b	B	+
<ul style="list-style-type: none"> ▪ Anxiety and depression 	2b	B	+
<ul style="list-style-type: none"> ▪ Cognitive dysfunction 	5	D	+/-
<ul style="list-style-type: none"> ▪ Menopause syndrome in Breast Cancer Patients <ul style="list-style-type: none"> ▪ to improve on frequency and severity of hot flashes ▪ Electro-Acupuncture to improve on sleep and hot flashes 	1b	B	+
	1b	B	+/-
	2a	B	+
<ul style="list-style-type: none"> ▪ Leucopenia (Moxibustion) 	2b	B	+/-
<ul style="list-style-type: none"> ▪ Treatment of chemotherapy induced polyneuropathy <ul style="list-style-type: none"> ▪ prophylactic ▪ therapeutic 	1b	B	-
	2b	B	+/-
<ul style="list-style-type: none"> ▪ Chronic lymph edema after Breast Cancer Treatment 	2b	B	+/-



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Complementary Treatment Mind-Body Medicine I

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Oxford		
LoE	GR	AGO
1a	A	+
1a	A	++

MBSR (Mindfulness-Based Stress Reduction)

Program improves quality of life, coping strategies, attentiveness, and lowers stress, anxiety, depression, fatigue, and sleep disturbances

Physical exercise / sport

min. 3x/week moderate endurance training in combination with workout exercises (2x per week) improve quality of life, cardio-respiratory fitness, physical performance, sleep, pain, depression, lymphedema, and fatigue

Complementary Treatment Mind-Body Medicine II

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	Oxford		
	LoE	GR	AGO
Relaxation techniques			
Reduction of anxiety and nausea, improvement of quality of life, reduction of psychological stress	2b	C	+/-
Yoga			
Improves sleep, quality of life, stress, anxiety, depression, fatigue, and sleep	1b	A	+
Qi Gong			
May improve quality of life, fatigue, and mood	2a	B	+/-
Tai Chi			
Improves quality of life, muscular strength, sleep	2a	B	+/-
Hypnosis (in combination with cognitive training)			
Improves fatigue and muscle weakness under radiotherapy; also reduces distress	1b	A	+

Prevention of Recurrence/Improvement of Overall Survival I

Modifiable Lifestyle Factors

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- **Physical exercise**

(equivalent to 3–5 hrs moderate walking per week)
improves DFS and OS, cardio-respiratory fitness,
physical functioning

- **Reduce Smoking**

- **Reduce Alcohol consumption (< 6 g/day)**

Oxford

LoE	GR	AGO
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2a	A	++
----	---	----

2b	A	+
----	---	---

2b	A	+
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Modifiable Lifestyle Factors

Nutrition after Breast Cancer Diagnosis

Prevention of Recurrence / Improvement of Overall Survival II

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	LoE	GR	AGO
■ Adherence to normal BMI / weight loss if overweight, irrespective of HR-status	1a	A	++
■ Low fat diet dietary counseling recommended	1a	B	+
■ Increased fiber intake (e.g. Flaxseed)	2a	B	+
■ Adherence to general nutrition guidelines (e.g. DGE, WCRF) similar to a Mediterranean Diet	2a	B	++
■ Dietary extremes	2a	B	--

Complementary Treatment

Prevention of Recurrence / Improvement of Overall Survival III

Dietary Supplements – Herbal Therapies

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	LoE	Oxford GR	AGO
Post treatment vitamin/antioxidant supplements does not appear to be associated with increased risk of recurrence (beware of drug/treatment interactions)	2b	B	
Smokers on antioxidant supplements are at higher risk for lung cancer	1b	A	
<u>For Prevention of BC Recurrence:</u>			
▪ Antioxidants	2a	B	+/-
▪ Vitamine supplementation in patients on a balanced diet (esp. Vit C, E, D)	2a	B	+/-
▪ Soy-food (natural source of phytoestrogenes)	2a	B	+/-
– food or concentrates containing ≥ 100 mg) isoflavones per day	2a	B	-
▪ Black Cohosh (Cimicifuga racemosa)	3b	C	+/-
▪ Antioxidant supplements (after completion of radiotherapy)	2b	B	+/-
▪ Green tea	3a	C	+/-
▪ Orthomolecular substances (Selenium, Zinc...)	5	D	-
▪ Artificial carotenoids appear to be associated with worse outcome	2b	B	-
▪ Proteolytic enzymes (Papain, Trypsin, Chymotrypsin)	3b	B	-
▪ Mistletoe (Viscum album)	1b	C	-
▪ Thymic peptides (impact on OS)	2a	B	-
▪ Oxygen- and ozone therapy	5	D	--
▪ Laetrile	1c	D	--
▪ Methadone	5	D	--
▪ Cancer bush (Sutherlandia frutescens), Devil's claw (Harpagophytum procumbens), Rooibos tea (Aspalathus linearis), Bambara groundnut (Vigna subterranean)	5	D	-
▪ Incense	5	D	-