

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

- **Versions 2002–2018:**

**Albert / Bauerfeind / Blohmer / Fersis / Friedrich /
Lück / Gerber / Göhring / Hanf / Janni / Kümmel /
von Minckwitz / Oberhoff / Scharl / Schmidt /
Schütz / Thomssen**

- **Version 2019:**

Nitz / Rhiem



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CAM

„Integrative Oncology“

CAM

Complementary + alternative medicine

Complementary

*In addition to
scientifically
based medicine*

Alternative

*Instead of
scientifically
based medicine*

„Unconventional methods“

UCT

Unconventional Thx

Unconventional

*Unproven outsider
methods*

General Considerations

	Oxford		
	LoE	GR	AGO
■ CAM instead of loco-regional interventions	2b	B	--
■ CAM instead of systemic treatment	2b	B	--

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

Complementary Therapy Pre- and Postoperative

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Preoperative:

- Hypnosis (reduces anxiety, pain, nausea)

Postoperative:

- Acupuncture (pain relief, anxiety)
- Acupuncture (nausea, vomiting)
- Massage therapy (pain relief)
- Early postop. exercise reduces upper-limb dysfunction
(beware: increased wound drainage)
- Physical exercise (reduces breast cancer related secondary
lymphedema)
- Prophylactic lymph drainage
- Yoga (arm and shoulder pain)
- Music therapy (reduces pain after mastectomy)

	Oxford		
	LoE	GR	AGO
Hypnosis (reduces anxiety, pain, nausea)	1b	B	+
Acupuncture (pain relief, anxiety)	1b	B	+/-
Acupuncture (nausea, vomiting)	2b	B	+
Massage therapy (pain relief)	2b	C	+/-
Early postop. exercise reduces upper-limb dysfunction (beware: increased wound drainage)	1a	A	+
Physical exercise (reduces breast cancer related secondary lymphedema)	1a	A	+
Prophylactic lymph 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

While on anti-cancer treatment: beware of drug interactions

- **Mistletoe (*Viscum album*)**
in order to reduce side effects
- **Thymic peptides**
lowered 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**
as an adjunct to reduce radio dermatitis
- **Ginger**
as an adjunct to guidelines 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	+/-

Complementary Treatment While on Cancer Treatment – Impact on Toxicity II

	Oxford		
	LoE	GR	AGO
Antioxidant supplements	1b	B	-
→ various antioxidative extracts to reduce anthracyclin-induced cardiotoxicity	2b	B	+/-
High dose vitamin C	1b	C	-
Vitamine E	2b	D	-
Selenium for alleviating side effects of therapy	1b	B	-
Co-Enzyme Q 10 (fatigue, QoL)	1b	B	-
Proteolytic enzymes in order to reduce chemotherapy-induced toxicity	3b	B	-
Chinese herbal medicine improves wound healing	1b	B	-*inf
Oxygen and ozone therapy	5	D	--
Short-term fasting (QoL, Fatigue)	3b	C	+/-*

- **Antioxidant supplements**
 → various antioxidative extracts to reduce anthracyclin-induced cardiotoxicity
- **High dose vitamin C**
- **Vitamine E**
- **Selenium for alleviating side effects of therapy**
- **Co-Enzyme Q 10 (fatigue, QoL)**
- **Proteolytic enzymes in order to reduce chemotherapy-induced toxicity**
- **Chinese herbal medicine improves wound healing**
- **Oxygen and ozone therapy**
- **Short-term fasting (QoL, Fatigue)**

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

* treatment in clinical trials recommended

Additional Complementary Therapy Side Effects Related to Cancer Treatments e.g. Chemotherapy

	Oxford		
	LoE	GR	AGO
■ Chinese medicinal herbs to treat the side effects of chemotherapy in breast cancer patients	1b	B	-
■ Homoeopathic medicines for adverse effects of cancer treatments	1b	B	+/-
■ Topical calendula ($\geq 20\%$ Calendula amount) for prophylaxis of acute dermatitis during radiotherapy			
■ Traumeel S [®] mouthwash to treat chemotherapy-induced stomatitis			
■ 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	+/-
■ Hydro therapy	3b	C	+/-

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Additional Complementary Therapy Side Effects Related to Cancer Treatments e.g. Chemotherapy



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	Oxford		
	LoE	GR	AGO
<ul style="list-style-type: none"> ▪ Acupuncture in order to improve on <ul style="list-style-type: none"> ▪ (Electro)-Acupuncture as adjunct to antiemetic treatment in case of Chemotherapy-induced nausea and vomiting 	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 Stimulations to relieve cancer pain 	1b 1a 2b	B B D	+ + +/-
<ul style="list-style-type: none"> ▪ Fatigue 	1a	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 1b 2a	B B 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"> ▪ prophylactically ▪ therapeutically 	1b 2b	B B	- +/-
<ul style="list-style-type: none"> ▪ Chronic lymph edema after Breast Cancer Treatment 	2b	B	+/-
<ul style="list-style-type: none"> ▪ Acu-pressure in order to improve on <ul style="list-style-type: none"> ▪ Nausea and vomiting as adjunct to antiemetic therapy ▪ Fatigue 	1b 1b	B B	+ +

Complementary Treatment

Mind-Body Medicine I

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MBSR (Mindfulness-Based Stress Reduction)

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

Physical exercise / sport

min. 150 min. moderate endurance training per week or 75 min. strenuous physical activity in combination with work out exercises (2x per week) improve quality of life, cardio-respiratory fitness, physical performance, sleep, pain, depression, polyneuropathy, lymphedema, fatigue

Oxford		
LoE	GR	AGO
1a	A	+

1a	A	++
----	---	----

Complementary Treatment

Oxford

Mind-Body Medicine II

LoE

GR

AGO

Yoga

Improves sleep, quality of life, stress, anxiety, depression, fatigue, sleep

1B

A

+

Qi Gong

May improve quality of life, fatigue, 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 radiation therapy, also reduces distress

1b

A

+

Relaxation techniques

Reduction of anxiety and nausea, improvement of quality of life, reduction of psychological stress

2b

C

+/-

Prevention of Recurrence/Improvement of Overall Survival I

Modifiable Lifestyle Factors

Oxford		
LoE	GR	AGO
2a	A	++
2b	A	+
2b	A	+

- **Physical exercise**
 (Equivalents 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)**

Modifiable Lifestyle Factors

Nutrition after Breast Cancer Diagnosis Prevention of Recurrence / Improvement of Overall Survival II

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

- **Adherence to normal BMI / weight loss if overweight, irrespective of HR-status**
- **Low fat diet**
dietary counseling recommended
- **Increased fiber intake (e.g. Flaxseed)**
- **Adherence to general nutrition guidelines**
(e.g. DGE, WCRF) in sense of Mediterranean Diet
- **Dietary extremes**

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Complementary Treatment

Prevention of Recurrence / Improvement of Overall Survival III

Dietary Supplements – Herbal Therapies

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