

# 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 2002–2022:**  
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- **Version 2023:**  
**Heil / Solomayer**

# CAM

## „Integrative Oncology“

**CAM**  
Complementary + alternative medicine

**Complementary**  
*In addition to  
scientifically  
based medicine*

**Alternative**  
*Instead of  
scientifically  
based medicine*

## „Unconventional methods“

**UCT**  
Unconventional Tx

**Unconventional**  
*Unproven outsider  
methods*



# Good Clinical Practice

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

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S3 LL “Komplementärmedizin in der Behandlung von onkologischen PatientInnen“

# General Considerations

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## Oxford

LoE	GR	AGO
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- CAM instead of loco-regional interventions

2b	B	--
----	---	----

- CAM instead of systemic treatment

2b	B	--
----	---	----

- 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

# Complementary Therapy

## Pre- and Postoperative

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	Oxford		
	LoE	GR	AGO
<b><u>Preoperative:</u></b>			
▪ Hypnosis (reduces anxiety, pain, nausea)	1b	B	+
<b><u>Postoperative:</u></b>			
▪ 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 lymphedema	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

Oxford

## 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** reduces fatigue; note: interacts with cytochrome P enzymes e.g. CYP 3A4
- **Ganoderma Lucidum** reduces fatigue, note: inhibits cytochrome P enzymes (e.g. CYP 3A4)
- **L-Carnitine**
  - peripheral neuropathy
  - treatment of fatigue
- **Melatonin** (reduces fatigue, improve sleep, depressive symptoms, cognition)
- **Curcumin** adjunct to reduce radiation-induced dermatitis
- **Ginger** adjunct to guideline-oriented medication to treat chemotherapy induced nausea & vomiting – beware of drug interactions

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

# Complementary Treatment While on Cancer Treatment – Impact on Toxicity II

Oxford

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

	LoE	GR	AGO
	<b>1b</b>	<b>B</b>	-
	<b>2b</b>	<b>B</b>	+/-
	<b>1b</b>	<b>C</b>	-
	<b>2b</b>	<b>D</b>	-
	<b>1b</b>	<b>B</b>	-
	<b>1b</b>	<b>B</b>	-
	<b>3b</b>	<b>B</b>	-
	<b>1b</b>	<b>B</b>	-*inf
	<b>5</b>	<b>D</b>	--
	<b>2b</b>	<b>B</b>	+/-**

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

\*\*treatment in clinical trials recommended

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# Additional Complementary Therapy of Side Effects Related to Cancer Treatments

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	Oxford		
	LoE	GR	AGO
<ul style="list-style-type: none"> <li>▪ <b>Chinese medicinal herbs</b> (to treat the side effects of chemotherapy)</li> </ul>	1b	B	-
<ul style="list-style-type: none"> <li>▪ <b>Homoeopathic medicine</b> (against therapy side effects / Placeboeffect)</li> </ul>	1b	B	+/-
<ul style="list-style-type: none"> <li>▪ <b>Topical Silymarin</b> (to prevent acute dermatitis during radiotherapy)</li> </ul>	3a	B	+/-
<ul style="list-style-type: none"> <li>▪ <b>Massage</b> (to improve on fatigue, pain, anxiety, nausea)</li> </ul>	1b	C	+/-
<ul style="list-style-type: none"> <li>▪ <b>Transcutaneous Electrical Nerve stimulation (TENS)</b> (against cancer pain)</li> </ul>	2b	D	+/-
<ul style="list-style-type: none"> <li>▪ <b>Hydrotherapy</b> (for supportive skin care)</li> </ul>	3b	C	+/-

# Additional Complementary Therapy of Side Effects Related to Cancer Treatments

## Acupuncture in order to improve on

- **Chemotherapy-induced nausea and vomiting**
  - (Electro)-Acupuncture as adjunct to antiemetic treatment
  - Acupressure as adjunct to antiemetic treatment
- **Pain**
  - Cancer pain
  - Aromatase-inhibitor – induced arthralgia
- **Fatigue**
  - Acupressure
- **Anxiety and depression**
- **Cognitive dysfunction**
- **Menopause syndrome in Breast Cancer Patients**
  - to improve on frequency and severity of hot flashes
  - Electro-Acupuncture to improve on sleep and hot flashes
- **Leucopenia (Moxibustion)**
- **Treatment of chemotherapy induced polyneuropathy**
  - prophylactically
  - therapeutically
- **Chronic lymph edema after Breast Cancer Treatment**

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

# Complementary Treatment

## Mind-Body Medicine I

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### 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

Oxford

LoE	GR	AGO
-----	----	-----

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

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

# Complementary Treatment

## Mind-Body Medicine II

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

## Prevention of Recurrence / Improvement of Overall Survival I

### Modifiable Lifestyle Factors

#### Oxford

- **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)**

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

# Modifiable Lifestyle Factors

## Nutrition after Breast Cancer Diagnosis

### Prevention of Recurrence / Improvement of Overall Survival II

#### Oxford

LoE	GR	AGO
-----	----	-----

- |  |    |   |    |
|--|----|---|----|
| <ul style="list-style-type: none"> <li>Adherence to normal BMI / weight loss if overweight, irrespective of HR-status</li> </ul>             | 1a | A | ++ |
| <ul style="list-style-type: none"> <li>Low fat diet<br/>dietary counseling recommended</li> </ul>  | 1a | B | +  |
| <ul style="list-style-type: none"> <li>Increased fiber intake (e.g. Flaxseed)</li> </ul>   | 2a | B | +  |
| <ul style="list-style-type: none"> <li>Adherence to general nutrition guidelines (e.g. DGE, WCRF) similar to a Mediterranean Diet</li> </ul> | 2a | B | ++ |
| <ul style="list-style-type: none"> <li>Dietary extremes</li> </ul>   | 2a | B | -- |

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# Complementary Treatment

## Prevention of Recurrence / Improvement of Overall Survival III.1

### Dietary Supplements – Herbal Therapies

**During anti-cancer treatment: Beware of drug interactions**

Oxford

LoE GR AGO

**Post treatment vitamine / 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

#### For Prevention of BC Recurrence:

- |   |    |   |     |
|---|----|---|-----|
| ▪ <b>Antioxidants</b>   | 2a | B | +/- |
| ▪ <b>Vitamine supplementation in patients on a balanced diet</b> (esp. Vitamine C, E) | 2a | B | +/- |
| ▪ <b>Vitamine D (after Vit D level)</b>   | 2b | B | +/- |
| ▪ <b>Soy-food</b> (natural source of phytoestrogenes)                                 | 2a | B | +/- |
| – <b>food or concentrates containing <math>\geq 100</math> mg isoflavones per day</b> | 2a | B | -   |
| ▪ <b>Black Cohosh</b> (Cimicifuga racemosa)   | 3b | C | +/- |
| ▪ <b>Antioxidant supplements</b> (after completion of radiotherapy)                   | 2b | B | +/- |
| ▪ <b>Green tea</b>  | 3a | C | +/- |
| ▪ <b>Selenium</b>   | 2b | B | +/- |

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# Complementary Treatment

## Prevention of Recurrence / Improvement of Overall Survival III.2

### Dietary Supplements – Herbal Therapies

**During anti-cancer treatment: Beware of drug interactions**

	Oxford		
	LoE	GR	AGO
▪ <b>Other orthomolecular substances (Zinc...)</b>	5	D	-
▪ <b>Artificial carotenoids appear to be associated with worse outcome</b>	2b	B	-
▪ <b>Proteolytic enzymes (Papain, Trypsin, Chymotrypsin)</b>	3b	B	-
▪ <b>Mistletoe (Viscum album)</b>	1b	C	-
▪ <b>Thymic peptides (impact on OS)</b>	2a	B	-
▪ <b>Oxygen- and ozone therapy</b>	5	D	--
▪ <b>Laetrile (Amygdalin, „Vitamine B17“)</b>	1c	D	--
▪ <b>Methadone</b>	5	D	--
▪ <b>Cancer bush (Sutherlandia frutescens), Devil's claw (Harpagophytum procumbens), Rooibos tea (Aspalathus linearis), Bambara groundnut (Vigna subterranean)</b>	4	C	-
▪ <b>Incense</b>	5	D	-
▪ <b>Curcuma, curcumine</b>	5	D	-