



Diagnosis and Treatment of Patients with early and advanced Breast Cancer

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Version 2019.1

Breast Cancer Follow-Up

Breast Cancer Follow-Up

- **Versionen 2002–2018:**

**Bauerfeind / Bischoff / Blohmer / Böhme / Costa /
Diel / Friedrich / Gerber / Hanf / Heinrich / Huober /
Janni / Kaufmann / Kümmel / Lux / Maass / Möbus /
Müller-Schimpfle/Mundhenke / Oberhoff / Rody /
Scharl /Solbach/ Solomayer / Thomssen**

- **Version 2019:**

Mundhenke / Wöckel

Breast Cancer Follow-Up Objectives

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	Oxford		
	LoE	GR	AGO
Early detection of curable events			
▪ In-breast recurrence	1a	B	++
▪ Loco-regional recurrence*	1a	B	++
Early detection of contralateral cancers	1a	B	++
Early detection of metastases			
▪ Early detection of symptomatic metastasis	3b	C	+
▪ Early detection of asymptomatic metastasis	1a	A	-

* loco-regional recurrence is associated with higher risk for mortality in node positive, PR negative, younger patients and patients with short time from diagnosis to recurrence

Breast Cancer Follow-Up Objectives

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- **Improve quality of life**
- **Improve physical performance**
- **Reduction and/or early detection of therapy related side effects (such as osteoporosis, cardiac failure, fatigue, neurotoxicity, lymphedema, sexual disorders, cognitive impairment, sterility and secondary tumors) and induction of therapies**
- **Participation in interventional programmes during follow-up for breast cancer survivors to maximise therapy adherence, assess live-style interventions and improve quality of life**

Oxford		
LoE	GR	AGO
2b	B	+
2a	B	+
2b	B	+
3b	B	+

Breast Cancer Follow-Up Objectives

Oxford		
LoE	GR	AGO
2b	B	++
5	D	++

- **Evaluation of current adjuvant therapy**
 - incl. monitoring of adherence with endocrine therapies
- **Pro-active improvement of adherence with therapy**
 - Patient information about efficacy data of 5-10 years endocrine therapy
 - Early therapy of side effects (sports, NSAIDs, vitamin D / calcium)

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Breast Cancer Follow-Up Objectives

Oxford		
LoE	GR	AGO
4	C	+

- **Psycho-social aspects of support and counseling**
 - Pregnancy, contraception, sexuality, quality of life, menopausal symptoms, fear of recurrence
 - Inclusion of related persons (partner, family, friends, caregivers)

- **Second opinion on primary therapy**
- **General counseling (genetics, HRT, prophylactic surgery, breast reconstruction)**

2c	B	++
2c	C	+

Breast Cancer Follow-Up Objectives

Lifestyle risks and comorbidity interventions that reduce unfavorable progression of disease.

	Oxford		
	LoE	GR	AGO
<ul style="list-style-type: none"> Treatment of type II-diabetes (> 25% undetected DM in postmenopausal BC patients) 	5	D	++
<ul style="list-style-type: none"> Weight intervention (if BMI < 18.5 and > 40) 	2a	B	+
<ul style="list-style-type: none"> Nightly fastening > 13h 	2b	B	+
<ul style="list-style-type: none"> Reduction of dietary intake (at least 15 % calories from fat) in HR neg. breast cancer patients is associated with improved overall survival 	2b	B	+
<ul style="list-style-type: none"> Smoking cessation (mortality increased 2 fold, mortality not directly BC associated 4 fold increase) 	2b	B	++
<ul style="list-style-type: none"> Alcohol consumption reduction (below 6g/d) 	2b	B	+
<ul style="list-style-type: none"> Moderate sport (in patients with reduced physical activity prior to diagnosis) 	1b	A	++
<ul style="list-style-type: none"> Distress reduction 	3b	B	+

Nightly fasting

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Prolonged nightly fasting improves prognosis in breast cancer patients

retrospective cohort study:

2413 BC-pat. (no diabetes), nightly fasting more or less than 13 hrs

Fasting < 13 hrs: HR 1.36, 36% increase of risk for recurrence
HR 1.21, n.s. increase of risk for mortality

every 2-hrs-prolonged fasting was correlated with a 20% increase of sleeping duration



Follow-up Objectives Reported by Patients

Oxford LoE 4 C

- **Examination of the breast**
- **Reassurance**
- **Guidance of patients, answering questions**
- **Evaluation of treatment and treatment of side effects**
- **Psychosocial support**

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**FORSCHEN
LEHREN
HEILEN**

Routine Follow-Up Examinations in Asymptomatic Patients



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Tests:

- **History (specific symptoms)**
- **Physical examination**
- **Breast self-examination**
- **Mammography**
- **Sonography of the breast**
- **Routine MRI of the breast***
- **MRI of the breast in case of inconclusive conventional imaging**
- **Pelvic examination**
- **DEXA-scan at baseline and repeat scan according to individual risk in women with premature menopause or women taking an AI**

	Oxford		
	LoE	GR	AGO
History (specific symptoms)	1a	A	++
Physical examination	1a	B	++
Breast self-examination	5	D	+
Mammography	1a	A	++
Sonography of the breast	2a	B	++
Routine MRI of the breast*	3a	B	+/-
MRI of the breast in case of inconclusive conventional imaging	3b	B	+
Pelvic examination	5	D	++
DEXA-scan at baseline and repeat scan according to individual risk in women with premature menopause or women taking an AI	5	D	+

* Consider in case of increased risk (age <50y, HR neg., diagnostic assessability C/D in mammography + ultrasound)

Routine Follow-Up Examinations in Asymptomatic Patients



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- Routine biochemistry (incl. tumor markers)
- Ultrasound of the liver
- Bone scan
- Chest X-ray
- CT of chest, abdomen and pelvis
- Detection of isolated / circulating tumor cells
- PET
- Whole body MRI

	Oxford		
	LoE	GR	AGO
	1a	A	-
	1a	A	-
	1a	A	-
	1a	A	-
	2a	D	-
	2a	D	-
	2b	B	-
	2b	B	-

Early Detection of Potentially Curable Events

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Local recurrence & in-breast recurrence:

- Incidence 7–20% (depending on time of F/U)
- Breast self-examination
- Physical examination, mammography & US
- Magnetic resonance imaging (MRI)*

	Oxford		
	LoE	GR	AGO
	5	D	+
	1a	A	++
	3a	B	+/-

* Consider in case of increased risk (age <50y, HR neg., diagnostic assessability C/D in mammography + ultrasound)

Early Detection of Potentially Curable Events

Oxford		
LoE	GR	AGO

Contralateral breast cancer:

- Rel. risk: 2,5–5
- Incidence: 0,5–1,0 % / year
- Breast self-examination
- Physical examination, mammography & US
- Routine breast MRI*

5	D	+
1a	A	++
3b	B	+/-

Male breast cancer: procedures as in women with breast cancer**

5	D	+
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*Consider in case of increased risk: age <50y, HR neg., diagnostic assessability C/D in mammography + ultrasound.

** See Chapter Breast Cancer Specific Situations

Early Detection of Potentially Curable Events

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Unrelated site carcinoma:

- MDS (RR 10,9), AML (RR 2,6-5,3), Colon RR 3,0; endometrium RR 1,6 ovary RR 1,5; lymphoma RR 7
- Screening for secondary malignancies according to current guidelines

- Pelvic examination and PAP smear
- Routine endometrial ultrasound / biopsy

	Oxford		
	LoE	GR	AGO
	5	D	++
	5	D	++
	1b	B	-

Follow-Up Care for Breast Cancer

Recommendations for asymptomatic pts.

(mod. nach ASCO-ACS Empfehlungen 2016, NCCN 3.2017 und S3-Leitlinie 2017)

Clinical follow-up		Follow-Up*			Screening/ Follow up		
Years after primary therapy		1	2	3	4	5	> 5
History, physical examination, counseling		inv.: every 3 months			inv.: every 6 months		inv.: every 12 months
Self-examination		monthly					
Imaging modalities and biochemistry		indicated only by complaints, clinical findings or suspicion of recurrence					
Mammo- graphy and additionally sonography	BCT**	ipsilat.: every 12 months contralat.: every 12 months		on both sides: every 12 months			
	Mastectomy	contralateral every 12 months					

* Continued follow-up visits if still on adjuvant treatment

** In pts with breast-conserving therapy (BCT): First mammography 1 year after initial mammography or at least 6 months after completion of radiotherapy

Breast Cancer Follow-up

Duration and Breast Nurses

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- **Duration of follow-up**

- until 5 yrs
 - until 10 yrs

- **Surveillance by specialized breast nurses**

Oxford		
LoE	GR	AGO
1c	A	++
1c	A	+
2b	B	+/-*

* **Studies recommended**

Luminal-like, HER2-positive and Triple-negative Breast Cancer Patients

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- **Intrinsic typing of breast cancer leads to the development of subgroups with different courses of disease**
- **Postoperative surveillance should be tailored to specific breast cancer type and their associated time periods of recurrence.**
- **ER-positive patients have a stable risk of recurrence of multiple years. Long term surveillance is recommended.**
- **In contrast, patients with HER2-positive disease and TNBC have an increased risk of recurrence in the early follow up phase. Surveillance should be adjusted accordingly.**