

Diagnosis and Treatment of Patients with Primary and Metastatic Breast Cancer

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Guidelines Breast
Version 2017.1

Breast Cancer Follow-Up

Breast Cancer Follow-Up

➤ **Versions 2002–2016:**

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

➤ **Version 2017:**

Maass / Friedrich

Further
Information

References

Breast Cancer Follow-Up Objectives

Oxford / AGO

LoE / GR

Early detection of curable events

- | | | | |
|-----------------------------|----|---|----|
| ➤ In-breast recurrence | 1a | B | ++ |
| ➤ Loco-regional recurrence* | 1a | B | ++ |

Early detection of metastases

- | | | | |
|--|----|---|---|
| ➤ Early detection of symptomatic metastases | 3b | C | + |
| ➤ Early detection of asymptomatic metastases | 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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**Oxford / AGO
LoE / GR**

- **Improve quality of life** **2b B +**
- **Improve physical performance** **2b B +**
- **Reduce therapy related side effects
as osteoporosis, cardiac failure, fatigue,
neurotoxicity, lymphedema, sexual disorders,
cognitive impairment** **2b B +**

Breast Cancer Follow-Up Objectives

Oxford / AGO

LoE / GR

- **Re-evaluation of current adjuvant therapy**
 - incl. monitoring of compliance with endocrine therapies

- **Pro-active improvement of compliance: 5 D ++**
 - Patient information about efficacy data of 5-10 year endocrine therapy
 - Early therapy of side effects (sports, NSAIDs, vitamin D / calcium)

5 D ++

5 D ++

Breast Cancer Follow-Up Objectives

Oxford / AGO

LoE / GR

- **Psycho-social aspects of support and counseling**
 - **Pregnancy, contraception, sexuality, quality of life, menopausal symptoms, fear for recurrence**

4 C +

- **Second opinion on primary therapy**

2c B ++
- **General counseling (genetics, HRT, prophylactic surgery, breast reconstruction)**

2c C +

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Breast Cancer Follow-Up Objectives

Intervention with regard to co-morbidities and life-style risks in order to reduce negative effects on disease course

Oxford / AGO

LoE / GR

- **Treatment of type II-diabetes**
(>25% undetected DM in postmenopausal BC patients) 5 D ++
- **Weight intervention**
(if BMI <18.5 and >40) 2a B +
- **Reduction of dietary intake** (at least 15 % calories from fat) 2b B +
in HR neg. breast cancer patients is associated with improved overall survival
- **Avoid Smoking** 2b B ++
(bc related mortality 2 x and BC unrelated mortality 4 x elevated)
- **Reduce alcohol consumption below 6 g/d** 2b B +
- **Moderate sport intervention when physical activity was reduced before** 1b A ++

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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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**
- **DXA-scan at baseline and repeat scan according to individual risk in women with premature menopause or women taking an AI**

Oxford / AGO LoE / GR

1a	A	++
1a	B	++
5	D	+
1a	A	++
2a	B	++
3a	B	+/-
3b	B	+
5	D	++
5	D	+

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	Oxford / AGO LoE / GR		
➤ Routine biochemistry (incl. tumor markers)	1a	A	-
➤ Ultrasound of the liver	1a	A	-
➤ Bone scan	1a	A	-
➤ Chest X-ray	1a	A	-
➤ CT of chest, abdomen and pelvis	2a	D	-
➤ Detection of isolated / circulating tumor cells	2a	D	-
➤ PET	2b	B	-
➤ Whole body MRI	2b	B	-

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Early Detection of Potentially Curable Events

Local recurrence & in-breast recurrence:

- **Incidence 7–20%**
 (depending on time of F/U)

- **Breast self-examination** **5 D +**

- **Physical examination, mammography & US** **1a A ++**

- **Magnetic resonance imaging (MRI)** **3a B +/-**



Early Detection of Potentially Curable Events

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Contralateral breast cancer:

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

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References

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Unrelated site carcinoma:

- **Colon RR 3,0; endometrium RR 1,6
ovary RR 1,5; lymphoma RR 7**
- **Screening for secondary malignancies
according to current guidelines** **5 D ++**
- **Pelvic examination and PAP smear** **5 D ++**
- **Routine endometrial ultrasound / biopsy** **1b B -**

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Information

References

Follow-Up Care for Breast Cancer

Recommendations for asymptomatic pts.

(modified ASCO-ACS guidelines 2016, NCCN 2.2016 guidelines and S3 national German guideline 2012)

Clinical follow-up		Follow-Up*				Screening	
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 sono- graphy	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

1c A ++
1c A +

➤ **Surveillance by specialized breast nurses**

2b B +/-*

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Further Information

References

*Studies recommended

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

- **Intrinsic typing of breast cancer leads to subgroups with different course of disease. Thus, postoperative surveillance should be adapted to specific time-dependent hazards of recurrence.**
- **ER-positive patients have stable risk over many years requiring long term surveillance.**
- **However, patients with HER2-positive disease and TNBC have more risk in the early phase of follow-up and should therefore receive more intense surveillance in the first years of follow-up.**

Breast Cancer Follow-Up (2/16)

No further information

No references

Breast Cancer Follow-Up, Objectives I (3/16)

No further information

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No further information

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Breast Cancer Follow-Up, Objectives III (5/16)

No further information

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Statement: Re-evaluation of current adjuvant therapy

Expert opinion Organkommission

Statement: Monitoring of compliance

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Breast Cancer Follow-Up, Objectives (6/16)

No further information

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Breast Cancer Follow-Up, Objectives (7/16)

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Statement: for all statements see most recent literature see at Survivorship care guidelines of ASC and ASCO

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Weight intervention

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Moderate sport intervention when physical activity was reduced

Chlebowski RT. Nutrition and physical activity influence on breast cancer incidence and outcome. Breast 2013; Aug;22
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Follow-up Objectives – Reported by Patients (8/16)

No further information

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Routine Follow-Up Examinations in Asymptomatic Patients (9/16)

No further information

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Statement: Physical examination

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Statement: Breast self-examination

Expert Opinion

Statement: Mammography

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Statement: Sonography of the breast

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Statement: MRI of the breast in case of inconclusive conventional imaging

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Statement: Pelvic examination

Expert Opinion

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Statement: DEXA scan

Expert Opinion

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Routine Follow-Up Examinations in Asymptomatic Patients (10/16)

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Statement: Routine biochemistry (incl. tumor markers)

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Statement: Bone scan

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Statement: Chest X-ray

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Statement: CT of chest, abdomen and pelvis

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Statement: Detection of isolated/circulating tumor cells

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Early Detection of Potentially Curable Events (11/16)

No further information

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Statement incidence

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Statement physical examination, mammography & US

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Statement physical examination, mammography & US

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Statement: Risk according to intrinsic subtype

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Early Detection of Potentially Curable Events (13/16)

No further information

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Statement: Risk

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Statement: Screening for secondary malignancies according to current guidelines

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Statement: Pelvic examination and PAP smear

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Statement: Endometrial ultrasound / biopsy

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Statement: Marrow neoplasms after adjuvant breast cancer therapy

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Follow-Up Care for Breast Cancer (14/16)

No further information

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Breast Cancer Follow-up – Duration and Breast Nurses (15/16)

No further information

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Luminal-like, HER2-positive and Triple-negative Breast Cancer Patients (16/16)

No further information

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