

Diagnosis and Treatment of Patients with Primary and Metastatic Breast Cancer

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Guidelines Breast
Version 2009.1.0

Specific Sites of Metastases

◀ START

Specific Sites Of Metastases

- **2002:**
Dall / Fersis / Friedrich

- **2003–2008:**
**Bischoff / Böhme / Brunnert / Diel /
Friedrich / Friedrichs / Janni / Maass /
Oberhoff / Schaller / Seegenschmiedt /
Souchon**

- **2009:**
Diel/ Hanf

Further
Information

References

Breast Surgery in Metastatic Disease

Oxford / AGO

LoE / GR

Local excision (R0) of primary tumor*

4 C +/-

Salvage mastectomy

3a C +/-

Further
Information

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Specific Sites of Metastases

- **Liver- and lung metastases**
- **Malignant pleural and pericardial effusions**
- **Ascites**
- **Bone marrow involvement**
- **Soft tissue metastases**

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Information

References

Liver Metastasis

Local Therapy

Oxford / AGO

LoE / GR

Resection of liver metastasis (R0)

Individual cases (liver function)

With isolated metastases

Histological/cytological verification

3b C +/-

Regional chemotherapy

3b C -

Regional radiotherapy (SIRT)

4 C +/-

Thermoablation

(RFA, LITT, cryotherapy)

3b C +/-

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Partial Hepatectomy Cryosurgery

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Author, Year	N	OS	Med S	Therapy
Raab 1998 Anticancer Research 18(3c):2231	34	5J. 18,4%	27 Mon.	OP
Elias 1995 Eur. J Surg Oncol 21(5)510	21	2J. 50% 5J. 9%	26 Mon.	19 +CT
Stehlin 1988 Ann. Surg 208(1)23 -35	9/71	5 J. 16%	28 Mon.	reg. CT+OP sign. > re g. CT
Schneebaum 1994 J.Surg.Oncol55(1):26	18/40		27 Mon. (CT 5 Mon.)	reg. CT+OP
Bilchik 1997 Am Surg 63(9)796	6		30 Mon.	Alternative: Cryosurgery

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Information

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Pulmonary Metastases

Local Therapy

Oxford / AGO

LoE / GR

Resection of pulmonary metastases (R0)
(for patients with solitary metastasis
and longer DFI)

3b C +/-

Thermoablation of pulmonary metastases
(RFA, LITT, cryotherapy)

3b C +/-

Histological verification of solitary metastasis recommended

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Partial Resection of the Lung

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Author, Year	N	Med. OS	OS	Result
Tatsuta 2002 Gan To Kagaku Ryoho29(12)2138	16			No difference Only selected cases followed VAT
Staren 1992 Arch Surg 127(11)1284		58 Mon.		Retrospectively: OP solitary Meta. OS-benefit for selected Pat.
Lanza 199 2 Ann Thor Surg 54(2)244	37		5 J. 49,5%	Retrospectively: OP solitary Meta. OS-benefit for selected Pat.

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Malignant Pleural Effusion

Incidence:

- ~ **10 %** of all breast cancer patients
- ~ **50%** of pat. with advanced breast cancer
- **30%** of all malignant effusions are caused by breast cancer

Clinical presentation:

- **Extensive pleural effusions (p.e.)** are mostly due to malignancy
- **The majority of malignant p.e.'s** are symptomatic
- **P.e. as single metastatic site** is prognostically favourable
- **Med. survival** is related to the presence of additional metastases

Diagnostic procedures:

- **Clinical examination**
- **Imaging techniques** (chest X-Ray, US, CT-Scan)
- **Proven malignant effusion** (cytology, histology by thoracoscopy)

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References

Malignant Pleural Effusion

Local Therapy

Oxford / AGO

LoE / GR

Thoracoscopy and Talcum-pleurodesis*	1b	B	++
VATS (video-assisted thorac. surgery):	5	D	++

Chemical pleurodesis

Talcum slurry	1a	B	++
Bleomycin	2b	C	+/-
Doxycycline	2b	C	+/-
Mitoxantrone	2b	C	+/-

Extended application of pleural drain			-
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Malignant Ascites

Local Therapy

Treatment according to:

Symptoms

Clinical manifestations

Anticipated response to systemic therapy

Oxford / AGO
LoE / GR

Ascites:

Puncture, drainage

Local chemotherapy

Systemic therapy

5 D ++

4 D +/-

3b D +

Further
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References

Malignant Pericardial Effusion

Local Therapy

Oxford / AGO
LoE / GR

Pericardial effusion:

Drainage, fenestration

3b B ++

VATS (video-assisted thorac. surgery)

4 D +

US-guided puncture

(instillation of 10 mg mitoxantron)

5 D +/-

Further
Information

References

Malignant Pericardial or Pleural Effusion

Author, year	results	N	
Yonemori 2007 Med Oncol 24(4)425	Med. survival at 6 months, 1 year survival 28%	88	Pericardial effusion
Picardi 1997 Surg Laparosc Endosc 7(4)320	Fenestration of pericardium effective Low morbidity	14	Pericardial effusion
Wang 2002 Chest 123(3)294	Double ballon pericardiotomy is a safe and effective method.	50	88% success rate
Robles 1997 Surg Endosc 11(3)253	Partial thorakoscopic pericardectomy:	22	Pericardial effusion
Benko 1999 Wird nachgeliefert	VAT is a safe and effective way.	233	High success rate
Nataf 1996 Arch Mal Coeur 89(2)223	VAT is best practice in case of emergency	22	Pericardial effusion

Further
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Bone Marrow Involvement Associated with Pancytopenia

Oxford / AGO

LoE / GR

Weekly chemotherapy:

Epirubicin	5	D	++
Paclitaxel	5	D	++
HER-2 pos.: add Trastuzumab	5	D	++

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Soft Tissue Metastasis

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Paresis, spinal cord compression*

2b C ++

Plexus infiltration

3b C ++

Soft tissue metastasis

3b C ++

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Soft Tissue Metastasis

Results of Local Radiotherapy (RT)

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Indication	RT Dose (Gy)	Success Rate (%)
Spinal Compression	3–4 x 3 + 12-20 x 2	78–88*
N.-Plexus-Infiltration	20–30 x 2	ca. 90
Soft tissue	20–30 x 2/12 x 3/5 x 4	ca. 90

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***3 year survival 50%**