

Diagnosis and Treatment of Patients with Primary and Metastatic Breast Cancer

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Endocrine and “Targeted” Therapy in Metastatic Breast Cancer

Endocrine Therapy of Metastatic Breast Cancer

➤ Version 2002:

Gerber / Friedrichs

➤ Versionen 2003–2016:

**Albert / Bischoff / Dall / Fersis / Friedrich /
Gerber / Huober / Janni / Jonat / Kaufmann /
Liedtke / Loibl / Lück / von Minckwitz /
Möbus / Müller / Mundhenke / Nitz /
Schneeweiß / Schütz / Stickeler**

➤ Version 2017:

Schmidt / Thill

Endocrine Therapy in Metastatic Breast Cancer

Indication

Oxford LoE: 1a

GR: A

AGO: ++

Endocrine-based therapy represents the first choice for metastatic breast cancer with positive (or unknown) hormone receptor (HR) status.

- **Exception: acute life-threatening disease**
- **Caveat: HR might change during the course of disease. Histology of recurrent site should be obtained whenever possible**

Comparison ER/PR and HER2 Metastasis vs. Primary Tumor

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Meta-analysis based on 48 (mostly retrospective) analyses:

Pooled discordance proportions were

- 20% (95%CI 16-35%) for ER
- 33% (95%CI 29-38%) for PR
- 8% (95% CI 6-10%) for HER2

Pooled proportions of tumors shifting from positive to negative and negative to positive were

- 4% and 14% for ER
- 46% and 15% for PR
- 13% and 5% for HER2

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Endocrine Therapy

General Considerations

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Within all lines of treatment, treatment options should take previous endocrine therapies, age and comorbidities into consideration as well as respective approval status

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Endocrine Therapy in Premenopausal Patients with HER2-Negative Metastatic Breast Cancer



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	Oxford / AGO LoE / GR		
➤ GnRHa+ Fulvestrant + Palbociclib	2b	B	++
➤ GnRHa + AI + Palbociclib	5	D	+
➤ GnRHa + tamoxifen (vs. OFS or Tam)	1a	A	++
➤ Ovarian function suppression (OFS)	2b	B	+
➤ Tamoxifen	2b	B	+
➤ GnRHa + AI (first or second line)	2b	B	+
➤ GnRHa + Fulvestrant	1b	B	+
➤ Aromatase inhibitors without OFS	3	D	--

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Endocrine Therapy in Postmenopausal Patients with HER2-Negative Metastatic Breast Cancer

*There is no evidence for superiority of a single aromatase inhibitor.
As everolimus plus exemestane is indicated after AI treatment, a
non-steroidal AI should be preferred in first line.

Oxford / AGO LoE / GR

➤ Letrozole + Palbociclib	1b	B	++
➤ Fulvestrant 500 mg + Palbociclib	1b	B	++
➤ Fulvestrant 500 mg	1b	B	++
➤ Aromatase inhibitors (3rd generation)*	1a	A	++
➤ Tamoxifen	1a	A	+
➤ Exemestane + Everolimus	1b	A	+
➤ Tamoxifen + Everolimus	2b	B	+
➤ Letrozole + Everolimus	2b ^a	B	+/-
➤ Fulvestrant + Everolimus	2b ^a	B	+/-
➤ Fulvestrant 250 mg + Anastrozole	1b	B	+/-
➤ Repeat prior treatments	5	D	+/-

Endocrine Therapy in Postmenopausal HER2-Negative Metastatic Breast Cancer Patients in Combination with Bevacizumab



**Oxford / AGO
LoE / GR**

- **Maintenance bevacizumab plus endocrine therapy after remission with chemotherapy and bevacizumab**
- **Bevacizumab plus endocrine treatment as first line therapy for advanced disease**

1b B +/-

1b B +/-

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HER2 Positive and HR-Positive Metastatic Breast Cancer

Endocrine Therapy in Postmenopausal HER2-Positive Metastatic Breast Cancer Patients

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	Oxford / AGO LoE / GR		
➤ Anastrozole plus trastuzumab	1b	B	+/-
➤ Letrozole plus trastuzumab	2b	B	+/-
➤ Letrozole plus lapatinib	1b	B	+/-
➤ Fulvestrant plus lapatinib	1b	B	+/-
➤ Aromatase inhibitors plus Trastuzumab / Pertuzumab*	2b^a	B	+/-

Poor efficacy of endocrine therapy alone.

Consider induction chemotherapy + anti-HER2-therapy (followed by endocrine + anti-HER2-therapy as maintenance therapy)!

***Study participation recommended**

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Concomitant or Sequential Endocrine-Cytostatic Treatment

Oxford / AGO
LoE / GR

➤ **Concomitant endocrine-cytotoxic
treatment**

1b A -

- **May increase response rate and progression free interval but not overall survival**
- **May increase toxicity**

➤ **Maintenance endocrine therapy after
chemotherapy induced response**

2b B +

- **Increases progression free interval**

Endocrine and “Targeted” Therapy in Metastatic Breast Cancer (2/11)

No further information

No references

Endocrine and “Targeted” Therapy in Metastatic Breast Cancer (3/11)

No further information

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Comparison ER/PR and HER2 Metastasis vs. Primary Tumor (4/11)

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Endocrine Therapy in Premenopausal Patients with HER2-Negative Metastatic Breast Cancer (6/11)

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Endocrine Therapy in Postmenopausal Patients with HER2-Negative Metastatic Breast Cancer (7/11)

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Endocrine Therapy in Postmenopausal HER2-Negative Metastatic Breast Cancer Patients in Combination with Bevacizumab (8/11)

No further information

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Endocrine Therapy in Postmenopausal HER2-Positive Metastatic Breast Cancer Patients (10/11)

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No further information

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