Neoadjuvante
(Primäre) systemische Therapie
Systematic review of published evidence
PUBMED 1999-2020
ASCO 1999-2020
SABCS 1999-2020
ECCO/ESMO 1999-2020
Systematic review of published evidence
PUBMED 1999-2020
ASCO 1999-2020
SABCS 1999-2020
ECCO/ESMO 1999-2020


Survival is similar after neoadjuvant (preoperative, primary) and adjuvant systemic therapy (with same regimen and cycle number)


Pathological complete response is associated with improved survival in all subgroups

4. EBCTCG. Long-term outcomes for neoad
7. Yee D, et al. Pathological complete response predicts event-free and distant disease free survival in the I-SPY 2 Trial. SABCS 2017 (abs GS3-08)

Can achieve operability in primary inoperable tumors

Improved options for breast conserving surgery

Reduces the rate of lymphadenectomies

Allows individualization of therapy according to mid-course treatment effect

Allows individualization of post-neoadjuvant treatment

Inflammatory breast cancer

Inoperable breast cancer

Large operable breast cancer primarily requiring mastectomy and adjuvant chemotherapy with the goal of breast conservation
2. Kaufmann M, et al. Recommendations from an international consensus conference on the current status and future of neoadjuvant
systemic therapy in primary breast cancer. Ann Surg Oncol 2012: 19; 1508


If similar postoperative adjuvant chemotherapy is indicated
General evidence

Lobular cancer
Metaplastic breast cancer


Multigene signature


3. Kuemmel S, Gluz O, Nitz U et al. Neoadjuvant nab-paclitaxel weekly versus dose-dense paclitaxel followed by dose-dense EC in high risk HR+/HER2- early BC by: Results from the neoadjuvant part of ADAPT HR+/HER2- trial. SABCS 2020; GS4-03.

Ki-67


Tumour infiltrating lymphocytes

**PIK3CA mutation**
1. Loibl S, et al. PIK3CA mutations are associated with lower rates of pathologic complete response to anti-human epidermal growth factor receptor 2 (her2) therapy in primary HER2-overexpressing breast cancer. J Clin Oncol 2014; 32; 3212

**gBRCA mutation**
HRD

PDL-1-Status (TNBC):
Use of adjuvant standard regimens for NACT

Taxane followed by anthracycline sequence

Platinum in TNBC (irrespective of BRCA status)
1. Alba E, et al. A randomized phase II trial of platinum salts in basal-like breast cancer patients in the neoadjuvant setting. Results from

Nab-Paclitaxel weekly instead of Paclitaxel weekly


ICPi in combination with chemotherapy


Breast ultrasound

Palpation
Mammography

MRI

PET(-CT)

Clip pN+
Pertuzumab + Trastuzumab in combination with chemotherapy

4. Gianni L et al. Five-year analysis of the phase II NeoSphere trial evaluating four cycles of neoadjuvant docetaxel (D) and/or trastuzumab (T) and/or pertuzumab (P). J Clin Oncol 33, 2015 (suppl; abstr 505)
7. Hurvitz SA, et al. Neoadjuvant trastuzumab, pertuzumab, and chemotherapy versus trastuzumab emtansine plus pertuzumab in
patients with HER2-positive breast cancer (KRISTINE): a randomised, open-label, multicentre, phase 3 trial. Lancet Oncol 2017. pii: S1470-2045(17)30716-7 [Epub ahead of print]


Trastuzumab in combination with chemotherapy

Anti-HER2 agents without chemotherapy
**Completion of neoadjuvant chemotherapy**


**In case of no change:**

**Completion of NACT, followed by surgery**


Continuation of NST with non-cross-resistant regimen

AC or EC x 4->D x 4 or Pw x 12


DAC2x -> NX x 4


In case of progressive disease:

Stop of NACT and immediate surgery or radiotherapy

Additional adjuvant chemotherapy with non-cross-resistant regimen


Complete Axillary lymph node dissection after positive sentinel lymph node may be omitted in certain cases due to lack of benefit in prospectively randomized studies


Statement: surgical intervention in the axilla before or after neoadjuvant chemotherapy


**Axillary intervention after PST**


**TAD (+SLNE) after PST, if pN1 (CNB prior to PST and ycN0**


ypNO (i+)
Mark previous tumor region

Surgery

Microscopically clear margins

Tumor resection according to imaging result
Positive margins after repeated excisions

Radiotherapy not feasible

In case of clinical complete response:
Inflammatory breast cancer in case of pCR
Multicentric lesions


cT4a-c breast cancer

**Initiation of chemotherapy after histologic diagnosis**


**Time between surgery and last chemotherapy**


**Radiotherapy 2 mths after surgery BCS**

1. Silva SB, Pereira AAL, Marta GN, de Barros Lima KML, de Freitas TB, Matutino ARB, de Azevedo Souza MCL, de Azevedo RGMV, de Viveiros PAH, da Silva Lima JM, Filassi JR, de Andrade Carvalho H, Piato JRM, Mano MS. Clinical impact of adjuvant radiation therapy


Postmenopausal patients:

Aromatase inhibitors (for up to 6 months)


AI and fulvestrant


Concurrent chemo-endocrine therapy


Preoperative ET and Ki67 measurement:


Prognostic scores following NST

1. Ellis MJ et al. Outcome prediction for estrogen receptor-positive breast cancer based on postneoadjuvant endocrine therapy tumor
Statement ER and/or PgR positiv (pCR und non-pCR) Endokrine Therapie nach Menopausenstatus (s. Kap. 10)

5. Loibl S, Marmé F, Martin M et al. Phase III study of palbociclib combined with endocrine therapy (ET) in patients with hormone-receptor-positive (HR+), HER2-negative primary breast cancerand with high relapse risk after neoadjuvant chemotherapy (NACT): First results from PENELlope-B. SABCS 2020: GS1-02.

Statement Tripel negativ (TNBC) (bei non-pCR) Capecitabine (8 Kurse)


Statement HER2 positiv (bei pCR):

Statement HER2 positiv (bei non-pCR):