Gynecological Issues in Breast Cancer Patients
Screened data bases:

- Pubmed: 2009–2017
- ASCO: 2009 - 2017
- Cochrane: 2009 - 2017
- Medline: 2009 - 2017

Screened: Metaanalyses/ Systematic reviews / RCT / Cohort studies
## Endocrine responsive disease

### Endocrine non-responsive disease

### Endocrine responsive disease: combined treatment TAM plus low-dose-HT

<table>
<thead>
<tr>
<th>Oxford</th>
<th>LoE</th>
<th>GR</th>
<th>AGO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endocrine responsive disease (receptor pos.)</td>
<td>1b</td>
<td>B</td>
<td>-</td>
</tr>
<tr>
<td>Endocrine non-responsive disease (receptor neg.)</td>
<td>3b</td>
<td>D</td>
<td>+/-</td>
</tr>
<tr>
<td>Endocrine responsive disease (receptor pos.): combined treatment TAM plus low-dose-HT</td>
<td>2b</td>
<td>B</td>
<td>+/-</td>
</tr>
<tr>
<td>Tibolone</td>
<td>1b</td>
<td>A</td>
<td>-</td>
</tr>
<tr>
<td>Topical vaginal application of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estradiol (E2) during AI therapy</td>
<td>4</td>
<td>D</td>
<td>+/-</td>
</tr>
<tr>
<td>Estradiol (E2) as treatment course*</td>
<td>4</td>
<td>C</td>
<td>-</td>
</tr>
</tbody>
</table>

* course: 4 weeks daily 1x1, further 8 weeks: 3 x 1 per week

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**Endocrine responsive disease**

**Endocrine non-responsive disease**

**Endocrine responsive disease: combined treatment TAM plus low-dose-HT**


**Tibolone:**

**Topical Vaginal Application:**


8. Drewe J, Bucher KA, Zahner C. A systematic review of non-hormonal treatments


**SSRI:**


**Venlafaxine**


**Desvenlafaxine**


**Paroxetine**

Fluoxetine

Citalopram

Gabapentin

Pregabalin

Clonidin

(D) MPA (depo-) (Medroxyprogesterone acetate)
Vitamine E


Melatonin

CAM* - Approaches to Reduce Menopausal Symptoms II

While anti-cancer treatment: Beware of drug interactions!

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<th>Oxford LoE</th>
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<tbody>
<tr>
<td>Soy-derived phytoestrogens – isoflavonoids</td>
<td>1b B</td>
<td>+/-</td>
<td>-</td>
</tr>
<tr>
<td>Hot flush</td>
<td>1b B</td>
<td>+/-</td>
<td>-</td>
</tr>
<tr>
<td>Sleep disturbance</td>
<td>1b B</td>
<td>+/-</td>
<td>-</td>
</tr>
<tr>
<td>Topical vaginal application</td>
<td>1b B</td>
<td>+/-</td>
<td>-</td>
</tr>
<tr>
<td>Red Clover isoflavonoids</td>
<td>1b B</td>
<td>+/-</td>
<td>-</td>
</tr>
<tr>
<td>Hot flush, sleep disturbance</td>
<td>(might stimulate BC especially in endocrine responsive disease)</td>
<td>1b B</td>
<td>+/-</td>
</tr>
<tr>
<td>Flaxseed-supplementation (40 g/d) (in HR+ ≤ 10 g/d) (reduces relapses, no effect on hot flashes)</td>
<td>2b B</td>
<td>+/-</td>
<td>-</td>
</tr>
<tr>
<td>Black Cohosh for hot flushes</td>
<td>1b B</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Black cohosh + St. John’s Wort</td>
<td>1b B</td>
<td>+/-</td>
<td>-</td>
</tr>
<tr>
<td>St. John’s Wort</td>
<td>(pharmacokinetic interference with endocrine therapy, cytotoxic drugs and tyrosin kinase inhibitors)</td>
<td>1b B</td>
<td>+/-</td>
</tr>
<tr>
<td>Ginseng root (Panax ginseng or P. quinquefolius)</td>
<td>1b B</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bromelain + Papain + Selenium + Lektin (for, Al induced joint symptoms)</td>
<td>3b B</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>


Soy-derived isoflavonoids

Red clover-derived isoflavonoids


**Flaxseed**


**Black cohosh (Cimicifuga racemosa) nor St John’s Wort nor Ginseng root**


**Sodium selenite, proteolytic plant enzymes (bromelaine and papain), and Lens culinaris lectin**


Physical exercise


Mind Body Medicine


Cognitive behavioral therapy


Acupuncture


5. Hershman DL, Unger JM, Greenlee H et al.: Randomized blinded sham- and waitlist-controlled trial of acupuncture for joint symptoms related to aromatase
inhibitors in women with early stage breast cancer (S1200). San Antonio Breast Cancer Conference 2017; Abstract GS4-04
**Ovarian Protection and Fertility Preservation in Premenopausal Patients Receiving (neo)-Adjuvant Chemotherapy (CT)**

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<tr>
<td>1a</td>
<td>B</td>
<td>+</td>
</tr>
<tr>
<td>2a</td>
<td>B</td>
<td>+/-</td>
</tr>
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<td>C</td>
<td>++</td>
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**Physical exercise**


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Assessment of Ovarian Reserve

Tests recommended to assess ovarian reserve (according to ACOG Committee Opinion No. 618: Ovarian Reserve Testing. Obstetrics & Gynecology 2015;125: 268-273)

<table>
<thead>
<tr>
<th>Test</th>
<th>Details</th>
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| FSH (follicle stimulating hormone) plus estradiol | - Serum level on cycle day 2–3  
- Variation between cycles possible  
- High FSH value is associated with poor response to ovarian stimulation |
| Anti Müllerian Hormone (AMH)                | - No specific timing for the test  
- Stable value within and between menstrual cycles  
- Low AMH value is associated with poor response to ovarian stimulation |
| Antral follicle count (AFC)                  | - Number of visible follicles (2–10 mm) during transvaginal ultrasound  
- Performed on cycle days 2–5  
- Number of antral follicles correlates with ovarian response to stimulation |

The tests do not predict failure to conceive. They should be used in counseling patients and provide a rough estimate of the fertility window. Results may decrease patient referral time to infertility centers.

Contraceptive Options for Women after Diagnosis of Breast Cancer

1. Barrier methods
   - Oxford LoE: 5
   - AGO: +

2. Sterilization (tubal ligation / vasectomy)
   - Oxford LoE: 5
   - AGO: +

3. Non-hormonal intrauterine devices (IUDs)
   - Oxford LoE: 3b
   - AGO: +

4. Levonorgestrel-releasing IUDs
   - Oxford LoE: 2b
   - AGO: +

5. Timing methods
   - Oxford LoE: 5
   - AGO: +

6. Injectable progestin-only contraceptives
   - Oxford LoE: 5
   - AGO: +

7. Progestin-only oral contraceptives
   - Oxford LoE: 5
   - AGO: +

8. Combined oral contraceptives
   - Oxford LoE: 5
   - AGO: +

9. Emergency Contraception

Options after Diagnosis of Breast Cancer

- Copper intrauterine device (Cu-IUD)
  - Oxford LoE: 5
  - AGO: +

- Levonorgestrel, Ulipristal orally
  - Oxford LoE: 5
  - AGO: +


Emergency Contraception - Options after Diagnosis of Breast Cancer

1. Casay PM et al: Caring for breast cancer survivor’s health and well being WJCO

Vaginal dryness


Laser therapy

2. Gambacciani M, Levancini M. Vaginal erbium laser as second-generation

Assessment of Sexual Health

- Sexual Complaints Screener (SCS) for women*
  German Translation

Screening-Check-Formular: Overall Sexual Function
1. Are you satisfied with your sexual life? yes, no; if no
2. How long have you been dissatisfied with your sexual life?
3. The problems with your sexual life are: (mark one or more):
   1. Problem with little or no interest in sex
   2. Problem with decreased genital sensation (feeling)
   3. Problem with decreased vaginal lubrication (dryness)
   4. Problem reaching orgasm
   5. Problem with pain during sex
   6. Other
4. Which problem is most bothersome? (circle) 1, 2, 3, 4, 5, 6.
5. Would you like to talk about it with your doctor?
