Optionen der primären Prävention:
Veränderbare Lifestyle-Faktoren
Screened data bases


Prospective multinational cohort study, n=5606, healthy women questionnaire, regular intake of ASS, NSAID, COX2-inhibitors

Regular ASS-intake: HR 0.61, CI 0.33-1.14, breast cancer incidence
Regular COX2-inhibitors: HR 0.39, CI 0.15-0.97, breast cancer incidence other NSAIDs: n.s.

[independent of BRCA-status]
- WHI substudy
- Among the 3460 women included in the analysis (mean [SD] age, 63.6 [7.6] years), multivariable-adjusted hazard ratios for the risk of invasive breast cancer were 1.89 (95% CI, 1.21-2.95) for the highest quartile of whole-body fat and 1.88 (95% CI, 1.18-2.98) for the highest quartile of trunk fat mass.
- The corresponding adjusted hazard ratios for ER-positive breast cancer were 2.21 (95% CI, 1.23-3.67) and 1.98 (95% CI, 1.18-3.31), respectively.


We examined associations of adult and adolescent recreational physical activity (quintiles of age-adjusted total metabolic equivalents per week) with breast cancer risk using multivariable Cox proportional hazards regression, adjusted for demographics, lifestyle factors, and body mass index. We tested for multiplicative interactions of physical activity with predicted absolute breast cancer familial risk based on pedigree data and with BRCA1 and BRCA2 mutation status. Baseline recreational physical activity level in the highest four quintiles compared with the lowest quintile was associated with a 20% lower breast cancer risk (HR, 0.80; 95% confidence interval, 0.68-0.93). The association was not modified by familial risk or BRCA mutation status (P interactions >0.05). No overall association was found for adolescent recreational physical activity. Recreational physical activity in adulthood may lower breast cancer risk for women across the spectrum of familial risk.


10. Chlebowski RT, Aragaki AK, Anderson GL. Menopausal Hormone Therapy Influence on Breast Cancer Outcomes in the Women's
epidemiological data from EPIC-Italy (n = 31,864)

Study: estimated lifetime estrogen exposure

Method: epigenome-wide association study, blood DNA samples, N=216, and 440 healthy controls

Results: an estimated 5% increase in breast cancer risk per 1-year longer ELEE (OR = 1.05, 95% CI 1.04-1.07, P = 3 x 10^-12) in EPIC-Italy. 694 CpG sites were associated with ELEE (FDR Q < 0.05)
# Prevention of Hormones in Postmenopausal Patients

<table>
<thead>
<tr>
<th>Study</th>
<th>N</th>
<th>MC-RR (95%CI)</th>
<th>Further Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHI</td>
<td>~27,000</td>
<td>1.3 (0.9-1.7)</td>
<td>1.3 (0.9-1.7) coronary events, 1.4 (0.9-2.0) stroke, 2.1 (0.9-4.9) pulmonary embolism, 2.1 (0.9-4.9) deep vein thrombosis</td>
</tr>
<tr>
<td>HERS</td>
<td>2,763</td>
<td>1.2 (0.9-1.6)</td>
<td>med. age 67 / no secondary prevention, risk effects as comp. to HRT + cholecalciferol</td>
</tr>
<tr>
<td>Million Women</td>
<td>1,084,110</td>
<td>1.66 (1.4-1.9)</td>
<td>EPC &gt; E, mode of appl., not relevant duration &gt; 5 y, T sildenafil 1.48 (1.2-1.7)</td>
</tr>
<tr>
<td>EPIC</td>
<td>1,153,747</td>
<td>1.4 (1.2-1.6)</td>
<td>E-Mono, EPC &gt; E</td>
</tr>
<tr>
<td>Metaanalyse</td>
<td>16 Studies</td>
<td>1.21-1.40</td>
<td>side effects as compared to HRT +</td>
</tr>
</tbody>
</table>

*Chlebowski et al., Climacteric 2015, 18:236-8*
*Chlebowski et al., J Natl Compr Canc Netw 2015, 13:917-24*
*Manson JE et al., JAMA 2017, 318:927-938*
## Prevention of Hormones (EGC) in Postmenopausal Patients

<table>
<thead>
<tr>
<th>Case-Control-Study, retrospect.</th>
<th>N</th>
<th>MC-RR (95% CI)</th>
<th>Further statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>1236 BC cases</td>
<td>2.09 (1.57-2.76)</td>
<td>current user</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.03 (0.80-1.30)</td>
<td>past user</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.62 (1.94-3.58)</td>
<td>E/P combination</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.80 (1.23-2.64)</td>
<td>E only</td>
</tr>
</tbody>
</table>

Salagame et al., Int J Cancer. 2016;138(8):1905-14

