

Supplementary Table 2. Additional characteristics of the included studies

Study	Design	Study period	Study drug	Cancer stage	Definition of symptoms	Primary outcome	Adjusting factors in multivariate analysis
Mortimer et al. WHEL trial (2008) [5]	Multisite randomized controlled trial of the effectiveness of a high-vegetable, low-fat diet	Mar 1995–Nov 2000	Tamoxifen	I (T1c)–IIIA	Hot flashes, night sweats	Recurrence-free survival	Age Time interval between diagnosis and study entry Tumor hormone receptor status Baseline dietary fiber intake Tumor stage Tumor grade
Cuzick et al. ATAC trial (2008) [11]	Phase 3, international, double-blind randomized control study	Jul 1996–Mar 2000	Anastrozole 1 mg daily for 5 yr vs. tamoxifen 20 mg daily for 5 yr	I–III	VM: hot flushes, night sweats, cold sweats MSK: arthralgia, arthritis, arthrosis, joint disorder	Recurrence-free survival	Age Body mass index Previous use of hormone replacement therapy Nodal status Tumor size Tumor grade
Mieog et al. IES study (2012) [8]	Phase 3, international, double-blind randomized control study	Feb 1998–Feb 2003	After tamoxifen for 2–3 yr, continue tamoxifen 20 or 30 mg daily vs. switch to exemestane 25 mg daily for the rest of the 5-yr period	I–III	Arthralgia, arthritis, back pain, bone pain, carpal tunnel decompression, carpal tunnel syndrome, joint stiffness, localized osteoarthritis, monoarthritis, musculoskeletal pain, myalgia, osteoarthritis, pain in foot, pain in limb, periartthritis, polyarthritits, polymyalgia, polymyalgia rheumatica, rheumatoid arthritis, spinal osteoarthritis, fibromyalgia, buttock pain, musculoskeletal chest pain	Disease-free survival	Treatment Geographical region Nodal status Previous chemotherapy Hormone replacement therapy
Fontein et al. TEAM trial (2013) [10]	Phase 3, multinational, open-label randomized controlled study	Jan 16, 2001–Jan 31, 2006	Exemestane 25 mg qd for 5 yr vs tamoxifen 20 mg qd for 2.5–3 yr, followed by exemestane 25 mg qd for 2.5–2 yr	I–III	VM: subjective and transient sensation of heat - hot flashes, night sweats MSK: arthralgia, arthritis, arthrosis, myalgia, bone pain VV: vaginal dryness, itching, vaginal discharge, dyspareunia, endometrial and libido disorders	Disease-free survival	Age Country Grade T stage N stage Most extensive surgery Adjuvant radiotherapy Adjuvant chemotherapy
Huober et al. BIG 1-98 trial (2014) [9]	Phase 3, international, double-blind randomized control study	1998–2000	Tamoxifen 20 mg daily vs. letrozole 2.5 mg daily for 5 yr (switch regimen was not included in this study)	I–III	VM: hot flushes, night sweats, vaginal dryness MSK: arthralgia, myalgia, carpal tunnel syndrome	Disease-free survival	Treatment Age quartile Body mass index quartile Prior hormone replacement therapy use Nodal status Tumor grade Tumor size Cooperative clinical trial group
Stearns et al. NCIC CTG MA.27 trial (2015) [7]	Phase 3, multinational, open-label randomized controlled study	Jun 2003–Jul 2008	Exemestane 25 mg daily vs. anastrozole 1 mg daily for 5 yr	I–III	VM: hot flushes, sweating MSK: joint pain, muscle pain, bone pain, arthritis, diminished joint function, other musculoskeletal problems	Recurrence-free survival	Celecoxib Aspirin Trastuzumab Tumor size Lymph node status Prior chemotherapy

VM=vasomotor symptoms; MSK=musculoskeletal symptoms; qd=every day; VV=vulvovaginal symptoms.