**Appendix Table K3. Characteristics of eligible studies: hormone interventions vs. active controls in adults with normal cognition**

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| **Hormone Intervention Type** | **Study****DesignCountry****RoB** | **N=** | **Population****Inclusion****Age (mean)****Sex (% female)****Race (% White)****Education (mean years)****Baseline Cognition** | **Intervention****Mode****Components****Frequency****Duration** | **Comparison****Mode****Components****Frequency****Duration** | **Outcome** **timing** | **Outcome****Domain [Instrument]** |
| **HRT-estrogen + progestin vs. tibolone** | Pan 200338RCTTaiwanMedium | 50 | Healthy postmenopausal women Mean age (SD): 52 (4) years100% femaleRace: NRMean MMSE (SD): 26.6 (2.3) | Estrogen + progestin (conjugated equine estrogen 0.625 mg/day + metheylprogresterone acetate 5 mg/day) for 6 months | Tibolone 2.5 mg/day for 6 months | 6 months | Brief Cognitive Test Performance [MMSE] [Cognitive Abilities Screening Instrument] |
| **HRT-estrogen + testosterone vs. estrogen** | Moller 201339Moller 201040RCT crossoverSweden Medium | 50 | Women aged 45-60 years with surgically-induced menopauseMean age (SD): 54 (2.9) years100% femaleRace: NRBaseline global cognition: NR | Estrogen + testosterone (estradiol valerate 2 mg/day + testosterone undecanoate 40 mg/day) for 6 months | Estrogen (estradiol valerate 2 mg/day) plus placebo  | 6 months  | Executive/Attention/Processing Speed [DSST, used To assess “cognitive fatigue,” = difference between the # of digits produced during the first 30 seconds and last 30 seconds of a 90 second session][Digit Symbol, Free Recall of Words] [Digit Symbol, Paired Recall of Symbols] [Digit Symbol, % Spatial Errors]Memory [Logical Story, Immediate Recall] [Logical Story, Delayed Recall] |
| **SERM Tamoxifen vs. Raloxifene** | Legault 200941RCTUSHigh | 1498 | Healthy postmenopausal women aged 65+ with increased risk of breast cancer, without dementia Mean age (SD): 70 (4.2) years100% female94% White34% some college34% college graduate67% 3MSE ≤ 9523% 3MSE 90-9410% 3MSE < 90 | Tamixofen 20 mg/d daily for up to 5 years | Raloxifene 60 mg daily for up to 5 years | Up to 5 years | Brief Cognitive Test Performance [3MS]Executive/Attention/Processing Speed [DS Forward] [DS Backward]Memory [BVRT] [CVLT]Language [Primary Mental Abilities-Verbal] [Verbal Fluency, Letter] [Verbal Fluency, Semantic]Visuospatial [Card Rotations]Motor [Finger Tapping] |
| **SERM/HRT - Tamoxifen or Raloxifene vs. CEE** | Espeland 201042RCTUSAHigh | 6461 (WHI & Co-STAR trial participants) | Women aged 65-80 years who participated in the WHI or CoSTAR trialsAge, years (approx.)65-59: 51%70-74: 34%75+: 15%100% female% white: 90%Education:7% < high school25% high school graduate38% some college30% college gradBaseline 3MS (SD): 95 (4.25) | Congugated equine estrogen 0.625 with or without medroxyprogesterone for at least 3 years | Tamoxifen (20 mg/d) or raloxifene (60 mg/d) for at least 3 years (There were also Placebo arms in both trials included in the analysis) | Mean follow-up: 4.6 years (range 1-8) years | Brief Cognitive Test Performance [3MS] |

3MS=Modified Mini Mental Status Examination; AD=Alzheimer’s disease; DHEA=dehydroepiandrosterone; BVRT=Benton Visual Retention Test; Co-STAR=The Study of Tamoxifen and Raloxifene Cognitive Substudy; DS=Digit Span (Forward and/or Backward); CVLT=California Verbal Learning Test; DSST=Digit Symbol Substitution Test; HRT=hormone replacement therapy; mg/d=milligrams per day; N=sample size; NR=not reported; RCT=randomized controlled trial; RoB=risk of bias; SD=standard deviation; SERM=selective estrogen receptor modulator; vs.=versus; WHI=Women’s Health Initiative