



## Selección de Resúmenes de Menopausia

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**Breast Cancer Res. 2018 Jan 19;20(1):4. doi: 10.1186/s13058-017-0928-0.**

### **Selective serotonin reuptake inhibitor use and breast cancer survival: a population-based cohort study.**

Busby J, Mills K, Zhang SD, Liberante FG, Cardwell CR.

**BACKGROUND:** Nearly 50% of breast cancer patients suffer from depression or anxiety. Selective serotonin reuptake inhibitors (SSRIs), the first-line pharmacological treatment for depression, have been implicated in breast cancer development through increased prolactin levels and tamoxifen metabolism inhibition. Previous studies of breast cancer progression have focused on tamoxifen users, or have been limited by their small sample size and methodology. Therefore, we used UK population-based data to more robustly investigate the association between SSRI use and cancer-specific mortality. **METHODS:** A cohort of patients with newly-diagnosed breast cancer between 1998 and 2012 was selected from English cancer registries and linked to prescription records from the Clinical Practice Research Datalink, and to death records from the Office for National Statistics. We used Cox regression models to calculate hazard ratios (HRs) comparing mortality between post-diagnostic SSRI users and non-users (using time-dependant covariates), after adjusting for demographics, comorbidities and pre-diagnosis use of hormone replacement therapy or oral contraceptives. We conducted several additional analyses to assess causality. **RESULTS:** Our cohort included 23,669 breast cancer patients, of which 2672 used SSRIs and 3053 died due to their breast cancer during follow-up. After adjustment, SSRI users had higher breast cancer-specific mortality than non-users (HR=1.27; 95% confidence interval (CI) 1.16, 1.40). However, this association was attenuated when restricting to patients with a prior history of depression (HR=1.14; 95% CI 0.98, 1.33), and when comparing to users of other antidepressant medications (HR=1.06; 95% CI 0.93, 1.20). There was some evidence of higher mortality among long-term SSRI users, even when restricting to patients with prior depression (HR=1.54; 95% CI 1.03, 2.29). **CONCLUSIONS:** In this large breast cancer cohort, SSRI use was associated with a 27% increase in breast cancer mortality. The cause of this is unknown; however, confounding by indication seems likely as it was largely attenuated when restricting to patients with prior depression, or when comparing SSRIs to other antidepressant medications. Clinicians should not be unduly concerned when prescribing SSRIs to breast cancer patients, but the increase in mortality among long-term SSRI users warrants further investigation.

**J Cachexia Sarcopenia Muscle. 2018 Jan 19. doi: 10.1002/jcsm.12268. [Epub ahead of print]**

### **Pitfalls in the measurement of muscle mass: a need for a reference standard.**

Buckinx F, Landi F, Cesari M, Fielding RA, Visser M, Engelke K, Maggi S, Dennison E, Al-Daghri NM, et al.

**BACKGROUND:** All proposed definitions of sarcopenia include the measurement of muscle mass, but the techniques and threshold values used vary. Indeed, the literature does not establish consensus on the best technique for measuring lean body mass. Thus, the objective measurement of sarcopenia is hampered by limitations intrinsic to assessment tools. The aim of this study was to review the methods to assess muscle mass and to reach consensus on the development of a reference standard. **METHODS:** Literature reviews were performed by members of the European Society for Clinical and Economic Aspects of Osteoporosis and Osteoarthritis working group on frailty and sarcopenia. Face-to-face meetings were organized for the whole group to make amendments and discuss further recommendations.

**RESULTS:** A wide range of techniques can be used to assess muscle mass. Cost, availability, and ease of use can determine whether the techniques are better suited to clinical practice or are more useful for research. No one technique subserves all requirements but dual energy X-ray absorptiometry could be considered as a reference standard (but not a gold standard) for measuring muscle lean body mass. **CONCLUSIONS:** Based on the feasibility, accuracy, safety, and low cost, dual energy X-ray absorptiometry can be considered as the reference standard for measuring muscle mass.

**Int J Cancer. 2018 Jan 19. doi: 10.1002/ijc.31267. [Epub ahead of print]**

### **Tibolone and risk of gynecological hormone sensitive cancer.**

Løkkegaard ECL, Mørch LS.

Risk of ovarian cancer with hormone therapy is associated with use of both unopposed estrogen therapy and combined estrogen-progestin therapy, whereas for endometrial cancer addition of continuous progestin decreases the estrogen induced increased risk. Less is known about risk with use of tibolone; a synthetic steroid with estrogenic, progestagenic, and androgenic properties. We assessed these associations in a prospective cohort study, including all Danish women 50-79 years of age and followed 1995-2009. National Danish Registers captured individually updated exposure information, cancer cases including histology and confounding factors. Poisson regression analyses provided multiple adjusted incidence rate ratio's (IRR). More than 900,000 women were followed for 9.8 years on average; 4,513 were diagnosed with ovarian cancer and 6,202 with endometrial cancer. Compared to women never on postmenopausal hormone therapy, current users of tibolone had an increased IRR for ovarian cancer (1.42(95% confidence interval [CI], 1.01-2.00) and serous ovarian tumors (2.21(95% CI 1.48-3.32)). The risk increased with duration of use, particularly for serous ovarian tumors. Compared to never users, the IRR of endometrial cancer was 3.56(95% CI 2.94-4.32) among current users of tibolone and 3.80(95% CI 3.08-4.69) of Type 1 endometrial cancer. The steepest risk increase with duration of use was for Type I tumors. In conclusion, tibolone is associated with increased risk for ovarian and endometrial cancer overall; and particular the risk of serous ovarian tumors and Type 1 endometrial cancer. Because the associations are stronger with increasing durations of use - and for hormone sensitive tumors -the results seem indicative of causality.

**BMC Womens Health. 2018 Jan 18;18(1):22. doi: 10.1186/s12905-017-0508-6.**

## **Real-world experience of women using extended-cycle vs monthly-cycle combined oral contraception in the United States: the National Health and Wellness Survey.**

Nappi RE, Lete I, Lee LK, Flores NM, Micheletti MC, Tang B.

**BACKGROUND:** The real-world experience of women receiving extended-cycle combined oral contraception (COC) versus monthly-cycle COC has not been reported. **METHODS:** Data were from the United States 2013 National Health and Wellness Survey. Eligible women (18-50 years old, premenopausal, without hysterectomy) currently using extended-cycle COC (3 months between periods) were compared with women using monthly-cycle COC. Treatment satisfaction (1 "extremely dissatisfied" to 7 "extremely satisfied"), adherence (8-item Morisky Medication Adherence Scale®), menstrual cycle-related symptoms, health-related quality of life (HRQOL) and health state utilities (Medical Outcomes Short Form Survey-36v2®), depression (9-item Patient Health Questionnaire), sleep difficulties, Work Productivity and Activity Impairment-General Health, and healthcare resource use were assessed using one-way analyses of variance, chi-square tests, and generalized linear models (adjusted for covariates). **RESULTS:** Participants included 260 (6.7%) women using extended-cycle and 3616 (93.3%) using monthly-cycle COC. Women using extended-cycle COC reported significantly higher treatment satisfaction ( $P=0.001$ ) and adherence ( $P=0.04$ ) and reduced heavy menstrual bleeding ( $P=0.029$ ). A non-significant tendency toward reduced menstrual pain (39.5% versus 47.3%) and menstrual cycle-related symptoms (40.0% versus 48.7%) was found in women using extended-cycle versus monthly-cycle COC. Significantly more women using extended-cycle COC reported health-related diagnoses, indicating preferential prescription for extended-cycle COC among women reporting more health problems. Consistent with this poorer health, more women using extended-cycle COC reported fatigue, headache, and activity impairment ( $P$  values  $< 0.05$ ). There were no other significant differences between groups. **CONCLUSIONS:** This real-world observational study supports extended-cycle COC as a valuable treatment option with high satisfaction, high adherence, and reduced heavy menstrual bleeding.

**JAMA Oncol. 2018 Jan 18. doi: 10.1001/jamaoncol.2017.4942. [Epub ahead of print]**

## **Modification of the Associations Between Duration of Oral Contraceptive Use and Ovarian, Endometrial, Breast, and Colorectal Cancers.**

Michels KA, Pfeiffer RM, Brinton LA, Trabert B.

**Importance:** Although oral contraceptive (OC) use is common, the influence of OC use on carcinogenesis is not fully understood. A recent Agency for Healthcare Research and Quality report identified a need to understand the consistency of OC use and cancer associations across subpopulations, including smokers and obese women. **Objective:**

To determine whether associations between duration of OC use and risk of specific cancers were modified by lifestyle characteristics. Design, Setting, and Participants: The prospective NIH-AARP Diet and Health Study (enrolled 1995-1996, followed until 2011), with population-based recruitment of AARP members in 6 states and 2 metropolitan areas. All analyses included at least 100 000 women who reported OC use at enrollment. We identified 1241 ovarian, 2337 endometrial, 11 114 breasts, and 3507 colorectal cancer cases during follow-up. Data analysis was performed between September 2016 and April 2017. Exposures: Duration of OC use (never or <1 year [reference], 1-4, 5-9, or ≥10 years).

Main Outcomes and Measures: Development of ovarian, endometrial, breast, and colorectal cancers. We examined effect modification by modifiable lifestyle characteristics: cigarette smoking, alcohol consumption, body mass index (BMI), and physical activity. We used Cox models adjusted for age, race, age at menarche, and the modifiers of interest.

Results: The analytic population was aged 50 to 71 years (median, 62 years) at enrollment and largely white (91%) and postmenopausal (96%). For ovarian cancer, OC use-associated risk reductions strengthened with duration of use (long-term OC use [≥10 years] HR, 0.60; 95% CI, 0.47-0.76;  $P < .001$  for trend) and were similar across modifiable lifestyle factors. Risk reductions for endometrial cancer strengthened with duration of use (long-term OC use HR, 0.66; 95% CI, 0.56-0.78;  $P < .001$  for trend); the most pronounced reductions were among long-term OC users who were smokers (HR, 0.47; 95% CI, 0.25-0.88), had obese BMIs (0.36; 95% CI, 0.25-0.52), and who exercised rarely (HR, 0.40; 95% CI, 0.29-0.56). Associations between OC use and breast and colorectal cancers were predominantly null. Conclusions and Relevance: Long-term OC use is consistently associated with reduced ovarian cancer risk across lifestyle factors. We observed the greatest risk reductions for endometrial cancer among women at risk for chronic diseases (ie, smokers, obese BMI). Oral contraceptive use may be beneficial for chemoprevention for a range of women with differing baseline cancer risks.

**J Clin Endocrinol Metab. 2018 Jan 12. doi: 10.1210/jc.2017-02426. [Epub ahead of print]**

### **Causes, patterns and severity of androgen excess in 1205 consecutively recruited women.**

Elhassan YS, Idkowiak J, Smith K, Asia M, Gleeson H, Webster R, Arlt W, O'Reilly MW.

Context: Androgen excess in women is predominantly due to underlying polycystic ovary syndrome (PCOS). However, there is a lack of clarity regarding patterns and severity of androgen excess that should be considered predictive of non-PCOS pathology. Objective: We examined the diagnostic utility of simultaneous measurement of serum dehydroepiandrosterone sulfate (DHEAS), androstenedione (A4) and testosterone (T) to delineate biochemical signatures and cut-offs predictive of non-PCOS disorders in women with androgen excess. Design: Retrospective review of all women undergoing serum androgen measurement at a large tertiary referral centre between 2012 and 2016. Serum A4 and T were measured by tandem mass spectrometry, DHEAS by immunoassay. Patients with at least one increased serum androgen underwent phenotyping by clinical notes review. Results: In 1205 women, DHEAS, A4, and T were measured simultaneously. PCOS was the most common diagnosis in premenopausal (89%) and postmenopausal women (29%). A4 was increased in all adrenocortical carcinoma cases (ACC; n=15) and T in all ovarian hyperthecosis cases (OHT; n=7); all but one case of congenital adrenal hyperplasia (CAH; n=18) were identified by increased levels of A4 and/or T. In premenopausal women, CAH was a prevalent cause of severe A4 (59%) and T (43%) excess; severe DHEAS excess was predominantly due to PCOS (80%). In postmenopausal women, all cases of severe DHEAS and A4 excess were caused by ACC, severe T excess equally by ACC and OHT. Conclusions: Pattern and severity of androgen excess are important predictors of non-PCOS pathology and may be used to guide further investigations as appropriate.

**Curr Osteoporos Rep. 2018 Jan 15. doi: 10.1007/s11914-018-0417-0. [Epub ahead of print]**

### **Regulation of Bone Metabolism by microRNAs.**

Taipaleenmäki H.

PURPOSE OF REVIEW: The small non-coding microRNAs (miRNAs) have emerged as important post-transcriptional regulators of various physiological and pathological processes. The purpose of this article is to review the important recent advances on the role of miRNAs in bone remodeling and metabolic bone disorders. RECENT FINDINGS: In a physiological context, miRNAs regulate bone formation and bone resorption, thereby contributing to the maintenance of bone homeostasis. Under pathological conditions, an aberrant miRNA signaling contributes to the onset and progression of skeletal disorders, such as osteoporosis. Furthermore, miRNAs can be secreted to circulation and have clinical potential as non-invasive biomarkers. In a therapeutic setting, miRNA delivery or

antagonism has been reported to affect several diseases under pre-clinical conditions thereby emerging as novel pharmacological tools. miRNAs are key regulators of bone remodeling in health and disease. The future perspectives in the field include the role of secreted miRNAs in cell-cell communication in the bone environment. Furthermore, the clinical potential of using miRNAs as diagnostic tools and therapeutic targets to treat metabolic bone diseases provides an attractive future direction.

**Heart. 2018 Jan 15. pii: heartjnl-2017-312289. doi: 10.1136/heartjnl-2017-312289. [Epub ahead of print]**

## **Women's reproductive factors and incident cardiovascular disease in the UK Biobank.**

Peters SA, Woodward M.

**BACKGROUND:** Studies have suggested that women's reproductive factors are associated with the risk of cardiovascular disease (CVD); however, findings are mixed. We assessed the relationship between reproductive factors and incident CVD in the UK Biobank. **METHODS:** Between 2006 and 2010, the UK Biobank recruited over 500 000 participants aged 40-69 years across the UK. During 7 years of follow-up, 9054 incident cases of CVD (34% women), 5782 cases of coronary heart disease (CHD) (28% women), and 3489 cases of stroke (43% women) were recorded among 267 440 women and 215 088 men without a history of CVD at baseline. Cox regression models yielded adjusted hazard ratios (HRs) for CVD, CHD and stroke associated with reproductive factors. **RESULTS:** Adjusted HRs (95% CI) for CVD were 1.10 (1.01 to 1.30) for early menarche (<12 years), 0.97 (0.96 to 0.98) for each year increase in age at first birth, 1.04 (1.00 to 1.09) for each miscarriage, 1.14 (1.02 to 1.28) for each stillbirth, and 1.33 (1.19 to 1.49) for early menopause (<47 years). Hysterectomy without oophorectomy or with previous oophorectomy had adjusted HRs of 1.16 (1.06 to 1.28) and 2.30 (1.20 to 4.43) for CVD. Each additional child was associated with a HR for CVD of 1.03 (1.00 to 1.06) in women and 1.03 (1.02 to 1.05) in men. **CONCLUSIONS:** Early menarche, early menopause, earlier age at first birth, and a history of miscarriage, stillbirth or hysterectomy were each independently associated with a higher risk of CVD in later life. The relationship between the number of children and incident CVD was similar for men and women.