



# Menopause

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**Original Articles**

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**Phase 3 randomized controlled study of gastroretentive gabapentin for the treatment of moderate-to-severe hot flashes in menopause**

JoAnn V. Pinkerton, MD, Risa Kagan, MD, David Portman, MD, Rekha Sathyanarayana, BS, and Michael Sweeney, MD, for the Breeze 3 Investigators

*Gabapentin is a modestly effective nonhormonal therapeutic option for treatment of moderate-to-severe menopausal hot flashes and is well tolerated with titration. Significantly greater reductions in mean hot flash frequency and severity over placebo were observed at weeks 4 and 12, and were maintained to 24 weeks.*

574

**Cognitive-behavior therapy for menopausal symptoms (hot flashes and night sweats): moderators and mediators of treatment effects**

Sam Norton, PhD, Joseph Chilcot, PhD, and Myra S. Hunter, PhD

*Cognitive behaviour therapy (CBT) has been found to reduce the impact of hot flashes and night sweats in recent randomised controlled trials (MENOS1 and MENOS2). This report investigates the moderators and mediators of the treatment effects, i.e. who might benefit and how the CBT works.*

579

**A standardized exercise intervention differentially affects premenopausal and postmenopausal African-American women**

Jan Kretzschmar, BS, Dianne M. Babbitt, MS, Keith M. Diaz, PhD, Deborah L. Feairheller, PhD, Kathleen M. Sturgeon, PhD, Amanda M. Perkins, PhD, Praveen Veerabhadrapa, PhD, Sheara T. Williamson, PhD, Chenyi Ling, BS, Hojun Lee, MS, Heather Grimm, MS, Sunny R. Thakkar, MS, Deborah L. Crabbe, MD, Mohammed A. Kashem, MD, and Michael D. Brown, PhD

*Postmenopausal African-American women show a blunted response to aerobic exercise training in terms of cardiovascular disease risk factors when compared to their premenopausal peers.*

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**Age at menopause and incident heart failure: the Multi-Ethnic Study of Atherosclerosis**

Imo A. Ebong, MD, MS, Karol E. Watson, MD, PhD, David C. Goff Jr, MD, PhD, David A. Bluemke, MD, PhD, Preethi Srikanthan, MD, MS, Tamara Horwich, MD, MS, and Alain G. Bertoni, MD, MPH

*An older menopausal age is independently associated with decreased risk of incident hot flashes.*

**SDC** 592**Long-term overall and disease-specific mortality associated with benign gynecologic surgery performed at different ages**

Gretchen L. Gierach, PhD, MPH, Ruth M. Pfeiffer, PhD, Deesha A. Patel, MS, Amanda Black, PhD, MPH, Catherine Schairer, PhD, Abigail Gill, MPH, Louise A. Brinton, PhD, MPH, and Mark E. Sherman, MD

*Bilateral oophorectomy for benign indications performed at younger ages is associated with excess mortality, which progressively attenuates with increasing age.*

602

**Association between personality traits and DSM-IV diagnosis of insomnia in peri- and postmenopausal women**

Stephanie A. Sassoon, PhD, Massimiliano de Zambotti, PhD, Ian M. Colrain, PhD, and Fiona C. Baker, PhD

*The results of this study show the relevance of personality factors, particularly neuroticism and obsessive-compulsive personality, as well as sensitivity to hot flashes, in influencing the experience of insomnia during perimenopause.*

**SDC** 612**Testosterone dose-response relationships in hysterectomized women with or without oophorectomy: effects on sexual function, body composition, muscle performance and physical function in a randomized trial**

Grace Huang, MD, Shehzad Basaria, MD, Thomas G. Travison, PhD, Matthew H. Ho, MD, PhD, Maithili Davda, MPH, Norman A. Mazer, MD, PhD, Renee Miciek, MS, Philip E. Knapp, MD, Anqi Zhang, PhD, Lauren Collins, RNP, Monica Ursino, BS, Erica Appleman, MA, Connie Dzekov, BA, Helene Stroh, BA, Miranda Ouellette, BA, Tyler Rundell, BA, Marilyn Baby, BA, Narender N. Bhatia, MD, Omid Khorram, MD, PhD, Theodore Friedman, MD, PhD, Thomas W. Storer, PhD, and Shalender Bhasin, MD

*In postmenopausal women with low endogenous serum testosterone levels, testosterone replacement at a supraphysiologic dose exerted positive influence on some aspects of sexual function and physical function.*

**SDC** 624**Oxidative stress contributes to large elastic arterial stiffening across the stages of the menopausal transition**

Kerry L. Hildreth, MD, Wendy M. Kohrt, PhD, and Kerrie L. Moreau, PhD

*In this cross-sectional study of healthy women, arterial stiffening worsened across the stages of the menopause transition. The increase in arterial stiffness appeared to be mediated, in part, by oxidative stress, particularly during the late perimenopausal and postmenopausal stages.*

633

**Efficacy and safety of flibanserin in postmenopausal women with hypoactive sexual desire disorder: results of the SNOWDROP trial**

James A. Simon, MD, Sheryl A. Kingsberg, PhD, Brad Shumel, MD, Vladimir Hanes, MD, Miguel Garcia Jr, MS, and Michael Sand, PhD, MPH

*In naturally postmenopausal women with hypoactive sexual desire disorder (HSDD), flibanserin improved sexual desire and sexual function, while reducing distress related to loss of desire. Flibanserin was well tolerated.*

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**Outcome and sexual function after transobturator tape procedure versus tension-free vaginal tape SECUR: a randomized controlled trial**

Xiang Tang, PhD, MD, Lan Zhu, MD, Shuo Liang, MD, and Jinghe Lang, MD

*In this study inside-out transobturator tape (TVT-O) and tension-free vaginal tape SECUR (TVT-S) procedures were effective in Chinese women with stress urinary incontinence over 2 years of follow-up. Operative time was shorter and the rate of postoperative groin/thigh pain was lower for patients undergoing the TVT-S procedure.*

646

**Endocrine biomarkers and symptom clusters during the menopausal transition and early postmenopause: observations from the Seattle Midlife Women's Health Study**

Nancy Fugate Woods, PhD, RN, FAAN, Lori Cray, PhD, RN, Ellen Sullivan Mitchell, PhD, and Jerald R. Herting, PhD

*Symptom clusters that include more severe hot flashes vs low severity symptoms are distinguished by both hypothalamic-pituitary-ovarian axis (urinary estrone, follicle stimulating hormone) and autonomic nervous system (norepinephrine, epinephrine) biomarkers.*

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**Randomized controlled trial of whole soy and isoflavone daidzein on menopausal symptoms in equol-producing Chinese postmenopausal women**

Zhao-min Liu, PhD, Suzanne C. Ho, PhD, Jean Woo, MD, Yu-ming Chen, PhD, and Carmen Wong, MD

*Six months consumption of whole soy (40g soy flour) or purified daidzein (63mg daidzein) had no significant effect on relief of menopausal symptoms in equol-producing Chinese postmenopausal women with prehypertension.*

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**Ovariectomy increases L-type Ca<sup>2+</sup> channel activity in porcine coronary smooth muscle**

Darla L. Tharp, PhD, Jan R. Ivey, Rebecca L. Shaw, and Douglas K. Bowles, PhD

*This study is the first to demonstrate that loss of endogenous female hormones increases L-type Ca<sup>2+</sup> channel activity, possibly by a Cavb1-mediated mechanism.*

**Brief Report**

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**Inverse correlation between the standard deviation of R-R intervals in supine position and the simplified menopausal index in women with climacteric symptoms**

Nobuyuki Yanagihara, PhD, Meikan Seki, MD, PhD, Masahiro Nakano, PhD, Toru Hachisuga, MD, PhD, and Yukio Goto, MD, PhD

*In climacteric women, the standard deviation of mean R-R interval of electrocardiogram in the supine position is negatively correlated with the simplified menopausal index score.*

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## Case Report

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OPEN

### Rapid response of breast cancer to neoadjuvant intramammary testosterone-anastrozole therapy: neoadjuvant hormone therapy in breast cancer

Rebecca L. Glaser, MD and Constantine Dimitrakakis, MD, PhD

*The rapid clinical response of hormone receptor positive breast cancer to neoadjuvant intramammary testosterone combined with anastrozole demonstrates the efficacy of this therapy and further confirms the inhibitory effect of testosterone in the breast. This novel therapy has the potential to identify early responders as well as simultaneously deliver local and systemic therapy.*

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## Clinical Corner

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### NAMS Practice Pearl

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#### Extended duration use of menopausal hormone therapy

Andrew M. Kaunitz, MD, FACOG, NCMP

*This Practice Pearl addresses clinical situations for which long-term hormone therapy (HT) might be appropriate and provides practical guidance regarding prudent therapeutic choices for women using HT for an extended duration.*

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