Why Do Estradiol Levels Vary Among Women Using Hormone Therapy?

*New study based on ELITE data identifies multiple determinants affecting estradiol levels and a woman’s protection against atherosclerosis*

CLEVELAND, Ohio (September 24, 2019)—The benefits of hormone therapy (HT) on atherosclerosis relates to achieved estradiol levels among those women who initiate HT early in postmenopause. Despite the use of hormones, however, women’s estradiol levels are often inconsistent. A new study identifies the various determinants of estradiol levels among healthy women using HT. Study results will be presented during The North American Menopause Society (NAMS) Annual Meeting in Chicago, September 25 to 28, 2019.

The researchers involved in the new study relied on analysis of data from the Early versus Late Intervention Trial with Estradiol (ELITE). Their work in this area previously showed that estradiol levels were higher among early compared to late postmenopausal women. The new research focused on identifying the various factors affecting estradiol levels and how this impacted a woman’s risk of developing atherosclerosis (hardening of the arteries).

The research yielded a number of results. Higher estradiol levels were associated with such determinants as higher BMI, higher weight, higher creatinine, and antihypertensive medication use, among others. Current and past smoking and use of antifungal medicine were associated with lower estradiol levels. These determinants were similar between early and late postmenopausal women.

“Healthcare providers need to consider the impact of these various factors when attempting to reach desirable estradiol levels in their postmenopausal patients and understand that not all women’s bodies will respond the same to hormone therapy,” says Dr. Intira Sriprasert, lead author of the study from the Keck School of Medicine of the University of Southern California.

“NAMS continues to promote individualized approaches to treating women’s menopause symptoms, and this study provides one more piece of evidence as to why such individualization is critical,” says Dr. Stephanie Faubion, NAMS medical director.

Drs. Sriprasert and Faubion are available for interviews before the presentation at the Annual Meeting.

For more information on menopause and healthy aging, visit menopause.org.
Founded in 1989, The North American Menopause Society (NAMS) is North America’s leading nonprofit organization dedicated to promoting the health and quality of life of all women during midlife and beyond through an understanding of menopause and healthy aging. Its multidisciplinary membership of 2,000 leaders in the field—including clinical and basic science experts from medicine, nursing, sociology, psychology, nutrition, anthropology, epidemiology, pharmacy, and education—makes NAMS uniquely qualified to serve as the definitive resource for health professionals and the public for accurate, unbiased information about menopause and healthy aging. To learn more about NAMS, visit www.menopause.org.