Despite Misperceptions, Hormone Therapy May Actually Reduce Risk of Lung Cancer

New study suggests that not only is hormone therapy not associated with the risk of lung cancer development in postmenopausal women, but a higher cumulative dosage may even reduce the risk.

CLEVELAND, Ohio (March 1, 2023)—Controversies surrounding hormone therapy (HT) and its benefits and risks have dominated the women’s health field for more than 2 decades. A large new study demonstrates that, despite some commonly held misperceptions, HT doesn’t increase a woman’s risk of developing lung cancer, and it could actually help reduce the risk. Study results are published online today in Menopause, the journal of The North American Menopause Society (NAMS).

Lung cancer remains one of the most common malignancies and the leading cause of cancer mortality worldwide. After breast cancer, it is the most common cancer in women, with its incidence increasing in women over the past few decades. Although smoking remains the number-one risk factor for developing lung cancer, it is estimated that from 20% to 50% of affected women are nonsmokers.

Because the characteristics of lung cancer in women differ from those in men, there has been speculation within the medical field that such sex-related differences could be explained by hormone factors. Several previous studies suggested that an increase in sex-steroid hormones can influence cell biology and contribute to the development and progression of lung cancer in women through binding with hormone receptors. Other studies have produced conflicting results by suggesting that women have a lower risk of lung cancer during their reproductive years.

Study results have been inconsistent regarding the association between HT and the risk of lung cancer development, with some suggesting HT leads to greater risk and others stating it results in lower risk. This latest study, which is based on data from more than 38,000 postmenopausal women, sought to investigate the association between HT and lung cancer risk based on dosage. After 16 years of follow-up, the study’s researchers concluded that HT is not associated with an increased risk of lung cancer in postmenopausal women. In fact, it found that with a higher cumulative dosage of HT or a therapy duration that was longer than 5 years, the risk of developing lung cancer was lower.

Study results are published in the article “The association between hormone therapy and risk of lung cancer in postmenopausal women: a 16-year nationwide population-based study.”

“This population-based study showed that hormone therapy use was not associated with lung cancer risk and, further, that it may be linked with a lower risk of lung cancer. This is reassuring for women weighing the cumulative risks and benefits of hormone therapy for management of menopause symptoms or osteoporosis prevention,” says Dr. Stephanie Faubion, NAMS medical director.
For more information about menopause and healthy aging, visit [www.menopause.org](http://www.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](http://www.menopause.org).