

Continued research needed on treatment for women with lung cancer who are never smokers

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The incidence of lung cancer in women affects an estimated 516,000 women worldwide, of which 100,000 are in the United States and 70,000 in Europe. Until now, lung cancers occurring in women have been treated similarly to lung cancers in men. However, numerous studies have highlighted different characteristics of lung cancer in women.

Researchers at the University of Toulouse III in France aim to compare clinical, pathological and biological characteristics of lung cancer in cohorts of women smokers and women never-smokers. They looked at a total of 140 women, 63 never-smokers and 77 former/current smokers who had adenocarcinoma.

A study published in the July issue of the *Journal of Thoracic Oncology (JTO)*, concludes that lung cancer in women who have never smoked is more frequently associated with EGFR mutations and [estrogen receptor](#) (ER) overexpression.

They observed differential [genetic alteration](#) repartition in women according to their tobacco status: 50.8 percent of never-smokers displayed an EGFR mutation versus 10.4 percent of smokers. In contrast, K-Ras was more frequently mutated in smokers (33.8%) than in never-smokers (9.5%). The researchers also observed a higher percentage of estrogen receptors (ER) ? expression in patients who never smoked when compared with smokers.

"These findings underline the possibility of treatment for women who have never smoked with drugs to target hormonal factors, [genetic abnormalities](#), or both," the authors say.

Provided by International Association for the

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