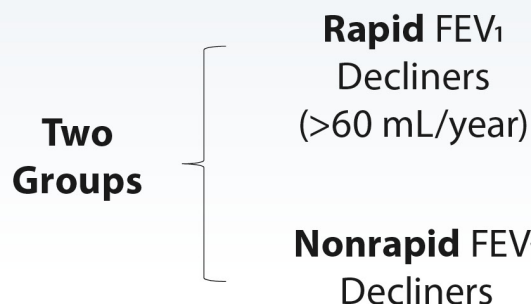


Is Accelerated Lung Function Decline Associated With Lung Cancer Development?

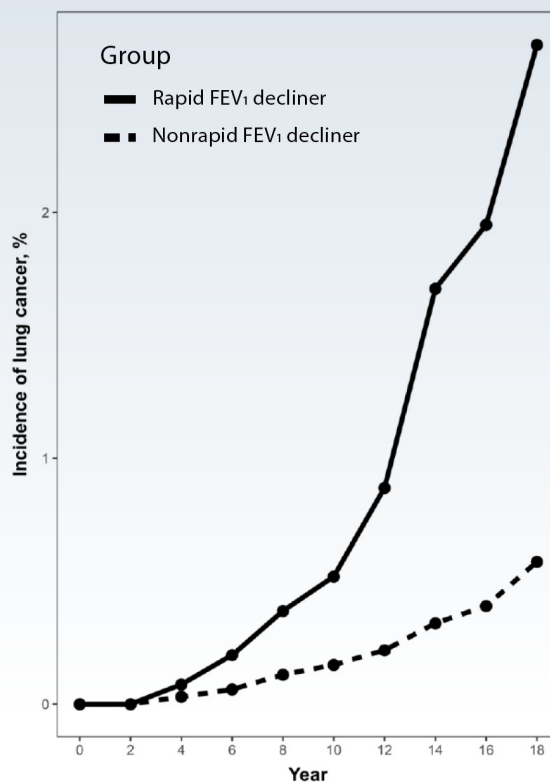
STUDY DESIGN

Longitudinal, observational study using epidemiological data from two **population-based** studies (2001 to 2019 in Korea)

Eligible subjects were 40 to 69 years of age, followed up with **spirometry** and development of **lung cancer**







RESULTS



Among 8,549 subjects, **15.1% (1,287)** had rapid FEV₁ decline, and **0.6% (48)** had newly developed lung cancer

Risk factors for development of lung cancer include:

	Adj Hazard Ratio
 Age ≥45	2.30 (1.01-5.22)
 ≥30 pack year	2.44 (1.30-4.57)
 Rapid FEV ₁ decliners	2.34 (1.28-4.28)
 WBC	1.13 (0.99-1.28)

The FEV₁ decline rate may be a potential biomarker for lung cancer development. Further study is needed to identify whether patients with rapid FEV₁ decline warrant lung cancer assessment or screening.