Study says VeriStrat predicts response but not survival benefit from erlotinib

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A study, published in the November 2012 issue of the International Association for the Study of Lung Cancer's (IASLC) *Journal of Thoracic Oncology*, showed the plasma test VeriStrat can predict response but not survival benefit from erlotinib. The study was conducted on a subset of patients enrolled in the NCIC Clinical Trials Group, BR.21 phase III trial of erlotinib versus placebo in previously treated advanced non-small cell lung cancer patients.

VeriStrat is a commercially available serum-based or plasma-based test using matrix-assisted laser desorption ionization mass spectrometry methods. In this study, plasma samples were used from 441 of 731 enrolled patients. VeriStrat testing was successful in 98.9 percent of samples (436), classifying patients as Good or Poor. For Good patients, the median survival was 10.5 months on erlotinib versus 6.6 months on placebo. For Poor patients, the median survival was 4 month for patients on erlotinib and 3.1 months for patients on the placebo.

The authors confirmed that VeriStrat was predictive for response and also looked at whether or not VeriStrat is predictive for differential survival benefit versus placebo. The interaction term comparing relative benefit in the two cohorts was not significant (p = 0.48), indicating that both the Good and Poor cohorts derived similar relative benefit from erlotinib. VeriStart was prognostic for both progression free and overall survival (i.e. in patients who did not receive erlotinib).

The authors conclude that VeriStrat is able to predict response, but neither progression nor overall survival to erlotinib and is a "prognostic biomarker in previously treated patients with advanced NSCLC. Further studies are required to define the clinical utility of VeriStrat and other blood-based biomarkers in defining the appropriate patient population for therapy with erlotinib and other EGFR-based therapies."

Provided by International Association for the Study of Lung Cancer