

Novel blood-based protein signature determined for rare, aggressive lung cancer

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Researchers have discovered a panel of 13 blood proteins that may be effective biomarkers to detect malignant mesothelioma, according to a study published Oct. 3 in the open access journal *PLOS ONE* by Rachel Ostroff from the company SomaLogic, which developed the new test, and colleagues at other institutions.

[Malignant mesothelioma](#) is a rare, aggressive form of lung cancer that can develop after prolonged exposure to asbestos. Because early diagnosis is difficult, most patients face a [poor prognosis](#) and have few options for treatment. In the study, authors compared proteins in the blood of asbestos-exposed individuals without the disease to [blood proteins](#) in asbestos-exposed mesothelioma patients to identify 13 proteins that are linked to the disease, including in the early stages.

According to the researchers, the discovery of the new blood-based proteins linked to the disease could help to develop better, less invasive diagnostic tests to detect the disease at earlier stages.

"By measuring changes in blood concentration of a series of proteins we can potentially catch mesothelioma at an earlier stage," said Ostroff, Clinical Research Director at SomaLogic. "Our efforts are now focused on further development of this approach, and how best to get it rapidly into clinical use for the sake of individuals who can benefit from earlier detection of this devastating disease."

More information: Ostroff RM, Mehan MR, Stewart A, Ayers D,

Brody EN, et al. (2012) Early Detection of Malignant Pleural Mesothelioma in Asbestos-Exposed Individuals with a Noninvasive Proteomics-Based Surveillance Tool. *PLoS ONE* 7(10): e46091.
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