Medical Xpress

Researchers find potential new target to treat malignant pleural mesothelioma

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Malignant mesothelioma is a rare asbestos-associated malignancy with limited therapeutic options. Despite advances in the treatment, the median survival remains 12 months from the time of diagnosis. Increased understanding of the molecular basis for the diverse signaling pathways involved in cancer progression should promote the discovery of novel biomarkers for early diagnosis and potentially lead to more effective therapeutic tools for the disease.

In the September issue of the International Association for the Study of Lung Cancer's journal, the *Journal of Thoracic Oncology* (*JTO*), researchers conclude that Ephrin (EPH) B2 seems to play an important role in malignant pleural mesothelioma cell lines and tumors.

Using expression arrays, researchers from the New York University Langone Medical Center looked at EPHB2 in 34 malignant pleural mesothelioma tumors , and found it significantly elevated in tumor tissue compared with matched normal peritoneum. They found EPHB2 overexpressed in all malignant pleural mesothelioma cell lines, but not in benign mesothelial cells. EPHB2 is also significantly elevated in malignant pleural mesothelioma tumor tissue compared with matched normal peritoneum.

Researchers believe, "targeting EPHB2 might provide a novel therapy to improve the prognosis in people suffering from malignant pleural mesothelioma. Further investigation in vitro using specific inhibitors of EPHB2 is required to determine the importance of EPHB2 and its

interactions with other members of the receptor kinases and their ligands to prove its role as a marker of progression or worse prognosis for malignant pleural mesothelioma.

Provided by International Association for the Study of Lung Cancer