

Mesothelial cells promote ovarian cancer metastasis

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Less than half of the women diagnosed with ovarian cancer will survive beyond 5 years. Ovarian cancer readily spreads to abdominal organs, which are covered by a layer of cells called the mesothelium. Ovarian cancer cells that breach the mesothelium invade and damage the organs underneath.

A new study in the *Journal of Clinical Investigation* indicates that [mesothelial cells](#) actively promote the spread of ovarian cancer. Using a three dimensional culture model of ovarian cancer metastasis, Ernst Lengyel and colleagues at the University of Chicago found that in the presence of cancer cells, mesothelial cells secrete a protein, fibronectin.

Fibronectin attracted [ovarian cancer cells](#) and encouraged cancer cell binding.

Ovarian cancer cells were not as attracted to mesothelial cells that did not make fibronectin.

The results of this study suggest that the mesothelium is an active participant in the spread of [ovarian cancer](#).

More information: Mesothelial cells promote early ovarian cancer metastasis through fibronectin secretion, J Clin Invest. [DOI: 10.1172/JCI74778](#)

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