# Study identifies new target in treating mesothelioma

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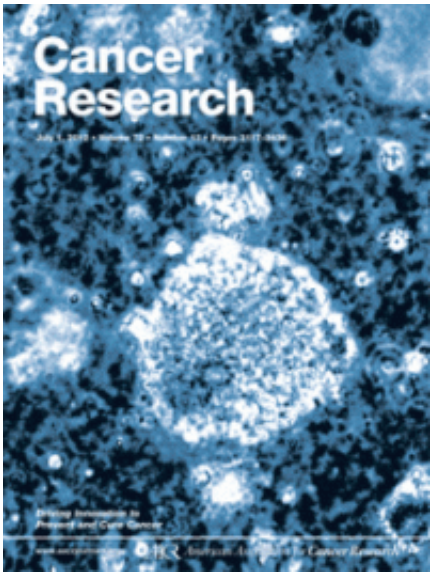


July 1, 2012 cover of Cancer Research

(Medical Xpress) -- An international team of researchers, led by Haining Yang, PhD, from the University of Hawai‘i Cancer Center, has identified HMGB1 as a critical protein in the pathogenesis of malignant mesothelioma, one of the most dangerous forms of cancer highly related to asbestos and erionite exposure. The findings are featured as the cover story of the July 1, 2012 issue of *Cancer Research*, one of the nation's leading cancer research publications.

“We are very excited about this discovery and are extremely pleased that

it was also chosen to be the featured cover story," said Yang. "The next step is to translate this discovery into actual treatments for mesothelioma patients."

The discovery outlines the process causing the growth of mesothelioma and offers scientists an opportunity to develop specific therapies for treatment. Mesothelioma is an aggressive cancer usually diagnosed at late stages and is resistant to current treatments. The average survival rate is less than one year. However, five percent of patients diagnosed at an early stage have survival rates of five to 10 years or more. The identification of this new biomarker for early detection will help shed light on developing novel targets for mesothelioma prevention and therapy.

Mesothelioma has been linked to occupational and environmental exposure to asbestos. Erionite, a naturally occurring mineral fiber, also causes mesothelioma. In the United States, approximately 3,000 cases of mesothelioma are diagnosed each year. It has been estimated that over 25 million people have been exposed to asbestos in the U.S., while the amount of those exposed to erionite is unknown.

The UH Cancer Center is a global leader in mesothelioma research. The center's thoracic oncology team led by Director Michele Carbone, MD, PhD, and Yang, has also been instrumental in several other recent discoveries including the identification of the gene that causes mesothelioma, BAP1.

The current study was an international effort and included investigators from the University of Hawai'i Cancer Center, the John A Burns School of Medicine in Honolulu, the San Raffaele University and Research Institute in Milan, Italy, the National Institutes of Health in Bethesda, Md., and the New York University School of Medicine.