

Protein Markers Predict Risk of Melanoma Recurrence

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(PhysOrg.com) -- A new prognostic tool that can determine the risk of recurrence in melanoma patients has been developed by researchers at Yale Cancer Center. The technology, based on five proteins expressed in melanoma tissue, can classify patients into a low-risk group, with 10% chance of recurrence at eight years, or a high-risk group that has a 40% probability of recurrence within that time. The study appears in the December 1 issue of the *Journal of Clinical Oncology*.

Twenty to sixty percent of patients with stage II [melanoma](#) will later be diagnosed with metastatic melanoma due to a recurrence of their disease. This new tool will help to identify patients who are at increased risk for recurrence so that they can be more carefully monitored.

“This test has the potential to really help melanoma patients and their clinicians decide how to manage their disease,” said David L. Rimm, M.D., Ph.D., lead author and professor of pathology at Yale School of Medicine.

The Yale Cancer Center research team analyzed protein expression from a historic group of tumor samples from patients taken from 1959 to 1994 and then tested it on an independent group of patient samples from [sentinel lymph node](#) surgery performed by Dr. Stephan Ariyan, clinical professor of surgery and director of the Yale Cancer Center Melanoma Program.

The prognostic tool is based on the AQUA™ system, a technology

developed at Yale School of Medicine by Rimm and Robert L. Camp, M.D. AQUA automatically measures and localizes specific variations in protein expression within tissue with a high level of precision. The multi-tissue proteomic analysis system combines fluorescence-based imaging with automated microscopy and high-throughput tissue microarray technologies.

HistoRx, a biotechnology company based in New Haven, has an exclusive license for the AQUA™ system.

More information: *J Clin Oncol.* 2009 Dec 1;27(34):5772-80.

Provided by Yale University ([news](#) : [web](#))

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