Potential biomarkers for pancreatic cancer identified

June 10 2008

In a new study in *PLoS Medicine*, Samir Hanash and colleagues from Fred Hutchinson Cancer Research Center in Seattle report the identification of proteins that appear in increased numbers at an early stage of pancreatic tumor development in a mouse model and may be a useful tool in detecting early tumors in humans.

Using a well-characterized mouse model of pancreatic cancer the researchers identified a panel of five proteins selected on the basis of their increased level at an early stage of tumor development in the mouse and tested them in a blinded study in 26 humans from the CARET (Carotene and Retinol Efficacy Trial) cohort.

The panel of proteins discriminated pancreatic cancer cases from matched controls in blood specimens obtained between 7 and 13 months prior to the development of symptoms and clinical diagnosis of pancreatic cancer.

Although further validation will be needed, these results indicate that mouse models of cancer, in combination with in-depth proteomic analysis, could help identify candidate markers in human cancer and potentially be used for early detection, say the researchers.

Citation: Faca VM, Song KS, Wang H, Zhang Q, Krasnoselsky AL, et al. (2008) A mouse to human search for plasma proteome changes associated with pancreatic tumor development. PLoS Med 5(6): e123.--
medicine.plosjournals.org/perl … journal.pmed.0050123