A potential new imaging agent for early diagnosis of most serious skin cancer

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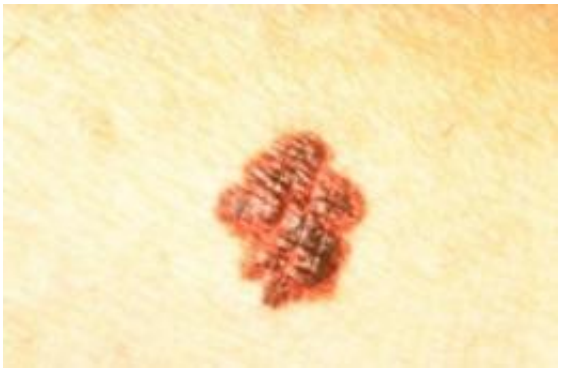

Scientists are reporting development and testing of a potential new material for diagnosing malignant melanoma, the most serious form of skin cancer. Shown is an image of melanoma on a patient's skin. Credit: Wikimedia Commons

Scientists in Australia are reporting development and testing in laboratory animals of a potential new material for diagnosing malignant melanoma, the most serious form of skin cancer. Their study is scheduled for the September 10 issue of the ACS' *Journal of the Medicinal Chemistry*.

Ivan Greguric and colleagues working within the Cooperative Research Consortium for Biomedical Imaging Develop, an Australian Government funded research group, note that about 130,000 new cases of malignant melanoma occur each year worldwide. Patients do best with early diagnosis and prompt treatment. The positron emission tomography

(PET) scans sometimes used for diagnosis sometimes miss small cancers, delaying diagnosis and treatment.

The scientists' search for better ways of diagnosis led them to a new group of radioactive imaging agents, called fluoronicotinamides, which they tested in laboratory mice that had melanoma. The most promising substance revealed melanoma cells with greater accuracy than imaging agents now in use, the scientists note. As a result, this substance could become a "superior" PET imaging agent for improving the diagnosis and monitoring the effectiveness of treatment of melanoma, they say. Clinical trials with this new agent are now scheduled for 2010.

More information: "Discovery of [18F]N-(2-(Diethylamino)ethyl)-6-fluoronicotinamide: A Melanoma Positron Emission Tomography Imaging Radiotracer with High Tumor to Body Contrast Ratio and Rapid Renal Clearance", Journal of the Medicinal Chemistry

Source: American Chemical Society (news : web)