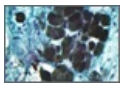
Switching targets to overcome drug resistance in melanoma.

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Advanced melanoma poses a high risk of developing resistance to anti-cancer drugs and frequently spreads through the body via a process called metastasis. For this reason, melanoma is the most deadly of the skin cancers. Researchers at the Wistar Institute have been studying the mechanism by which melanoma develops drug resistance, and they have experimental proof of a potential solution to this problem.

In many cases of melanoma, the cancer cells contain a mutant version of a gene (BRAF) that supports unregulated cell growth. Drugs targeting BRAF can limit cancer growth, but advanced melanoma cells are capable of changing the cell signaling pathways they use, blocking the effects of these drugs. Wistar researchers discovered that by inhibiting proteins that control the alternate pathways (MEK and IGF-1R/PI3K), they can stop the growth of cancer resistant to BRAF inhibitors. This discovery suggests that **melanoma may be more treatable with a combination of drugs** targeting several signaling pathways.

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