Contents

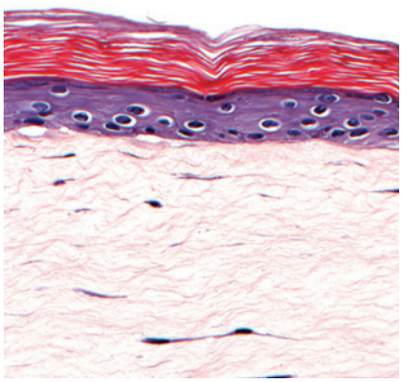
Cancer Prevention Research
The Forefront of Prevention Science
February 2013 • Volume 6 • Number 2

COMMENTARY

RESEARCH ARTICLES

ABOUT THE COVER

Immunosuppressive drugs are thought to cause the dramatically increased risk of carcinomas in sun-exposed skin of organ transplant recipients. However, the drugs differ in local effects on the skin and may thus be predictive of skin cancer risk and potentially provide guidance in minimizing the risk. In this study, the tumorigenic properties of commonly used immunosuppressants (e.g., azathioprine, cyclosporine, and rapamycin) were compared in experiments using human skin and mouse models. The cover shows a representative H&E-stained image of human skin equivalents (HSE) supplemented with rapamycin (100 nM) for a 2-week duration. Rapamycin reduced the epidermis that developed in the HSE: 3 to 4 epidermal cell layers were formed instead of 7 to 8 in the Control HSE supplemented with dimethyl sulfoxide (DMSO) (not shown). Rapamycin also decreased the proliferation index and expression of hyperproliferative markers K16 and K17 (not shown). These experiments established whether local effects of immunosuppressants on UV-induced apoptosis and p53 mutations in the skin are predictive of skin cancer risk. See article by Voskamp and colleagues(beginning on page 129) for more information.



Cancer Prevention Research

6 (2)

Cancer Prev Res 2013;6:71-159.