

RNA-seq Analysis of Host and Viral Gene Expression Highlights Interaction between Varicella Zoster Virus and Keratinocyte Differentiation

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1 Abstract

Talk about the medical science of superstition. Scientists have been trying to better understand how drugs are prevented from working. Until now, they have found a sinister culprit: hormones.

Previously, the chemical reaction in the liver gave rise to the drugs to fight off cancer. Now, scientists at the University of Utah have discovered a growth barrier to drugs that play a role in TNF-A, a chemical that clogs up the artery walls of the liver, preventing drugs from building up. The more a patient with liver disease needs to take drugs, the more like to, or resistant, they become.

TNF-A, the dominant agent in the drug pipeline, becomes resistant as soon as the liver releases it because the hormone estrogen plays a role, says Kyle Kurambie, M.D., M.Sc., study co-author and postdoctoral fellow in the department of molecular biology and the Biomedical Engineering Program at the University of Utah School of Medicine.

Patients with TNF-A resistance, Kurambie says, often die within months of their last course of anti-TNF drugs.

The pathway at the root of this pathway may have nothing to do with the heart or the immune system, as previously thought.

Now, the scientists know the molecular structure of the growth path, which they believe could be used as a genetic test for the damaging activity of TNF-A inhibitors. It could be used to block these auras, which play a role in nephrology, during transplants of kidneys and pancreas, they say.

1.1 Image Analysis

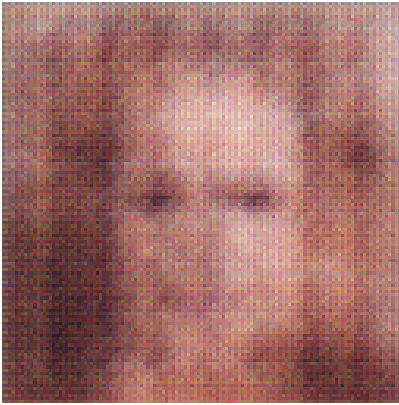


Figure 1: A Close Up Of A Person Wearing A Suit And Tie