

Efficacy of the new Yersinia pestis subunit vaccine in animal models of plague

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Abstract

Until recently, the vaccine against Yersinia pestis, the etiological agent of plague, consisted of a formalin-inactivated, whole-cell vaccine. The vaccine was discontinued because it apparently only protected the vaccinated host against bubonic plague but not pneumonic plague. We have since found that the whole-cell vaccine only induced antibodies against the capsule F1 protein but not antibodies against the virulence protein (V-antigen) that appears to be required for a robust protection. The new plague vaccine consists of subunits of the F1 capsule protein and V-antigen either as individual subunits or a fusion of the two subunits. The genes for each these proteins are encoded on two separate

Biography

Amemiya received his doctoral degree from Rutgers University in Microbiology in 1973. He did his post-graduate

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