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## Studies of Human Herpes Virus-8 in Thailand

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Thailand has experienced a major epidemic of HIV/AIDS since 1988. Currently over 650,000 persons are HIV-infected and 400,000 have died of AIDS in Thailand. However, Kaposi's Sarcoma (KS) is very rare. Among the 101,945 adults AIDS cases reported between 1994 and 1998 only 0.2% had KS. We have ruled out the possibility that HHV-8 infections are rare; in a study of 992 persons at risk or positive for HIV we found an HHV-8 antibody prevalence of 24.2%. Another hypothesis to explain the rarity of KS is that endothelial cells in Thai's are relatively resistant to HHV-8 infection. We obtained umbilical cord endothelial cell cultures from 10 Thai women who were HIV negative and analyzed their DNA for novel single nucleotide polymorphisms (SNPs) in the coding region for the promoter and 3' UTR region of the DC-SIGN gene. These results were compared to other Asian (11), Caucasian (n = 120), and African (n = 206) samples. No novel SNPs were found in the Thai samples, however some haplotypes that differed from the Caucasian samples were found. Three Thai samples were homozygous for a complete absence of SNPs in the UTR and reduced diversity in the promoter. This was not seen in the Caucasian samples. Additional analysis of linkage disequilibrium and HHV-8 infectivity analysis of these cell cultures are in progress. It is possible that genetic differences in the endothelial cell receptors for HHV-8 or resistance of cells to HHV-8 among Thai's could partially explain the rarity of AIDS-related KS among Asians.