

Malaria pathogenesis and immunity: the role of variant parasite antigens on the infected erythrocyte surface

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*Plasmodium falciparum* is a major source of morbidity and mortality in the tropics, particularly in young children and pregnant women. The particular virulence of *P. falciparum* is linked to the ability of this parasite to express clonally variant antigens on the surface of infected erythrocytes (IEs). These antigens (called variant surface antigens or VSA) allow IEs to adhere to a range of vascular host receptors, thereby escaping destruction in the spleen. IE adhesion is thought to be a key pathogenic factor, and also an important target of acquired protective immunity following exposure to the infection. In this talk, I will present the current understanding of how VSA are involved in malarial pathogenesis and acquired immunity, as well as an overview of ongoing efforts to develop particular VSA into candidates for vaccination against particular syndromes of severe *P. falciparum* malaria.