

oocyst number in the mosquito midgut. Several combinations of homologous and heterologous antigen-delivery prime boost strategy were also evaluated and the results suggested that antibody titers and transmission-blocking activities by the three prime-boost strategies (DNA prime/DNA boost, DNA prime/protein boost, and protein prime/protein boost) were comparable with slightly better immunogenicity of heterologous antigen-delivery prime/boost as compared to DNA/DNA alone. These results demonstrate potent immunogenicity of DNA vaccines encoding Pvs25 and Pvs28 and warrant further evaluation in non-human primates.

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PRE-CLINICAL EVALUATION OF THE MALARIA VACCINE CANDIDATE *P. FALCIPARUM* MSP1₄₂ FORMULATED WITH NOVEL ADJUVANTS OR WITH ALUM

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We compared the safety and immunogenicity of the recombinant *Plasmodium falciparum* MSP1₄₂ antigen formulated with four novel adjuvant systems (AS01B, AS02A, AS05 and AS08) to alum in rhesus monkeys. All five formulations of MSP1₄₂ were safe and immunogenic. Whereas, all MSP1₄₂ formulations tested generated high stimulation indices for lymphocyte proliferation (ranging from 27 to 50), the AS02A and AS01B formulations induced the highest levels of specific anti-MSP1₄₂ antibody. ELISPOT assays showed that the AS02A and AS01B vaccine formulations-induced different cytokine response profiles. Using the ratio of IFN- γ /IL-5 secreting cells as the metric, the AS01B formulation induced a strong Th1 response, whereas the AS02A formulation induced a balanced Th1/Th2 response. The IFN- γ response generated by AS02A and AS01B formulations persisted at least 24 weeks after final vaccination. The notable difference in Th1/Th2 polarization induced by the AS02A and AS01B formulations warrants comparative clinical testing.

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REEMERGENCE AND PERSISTENCE OF VIVAX MALARIA IN THE REPUBLIC OF KOREA

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After the Republic of Korea (ROK, South Korea) was declared malaria-free in 1979, *Plasmodium vivax* malaria reemerged in 1993, putting Korea's military and civilians and US soldiers at risk for the disease. Our goals were to provide an overview of the reemergence and persistence of malaria in Korea, identify improvements for control, and assess the ongoing and future threat of malaria in Korea. We identified all reported malaria cases in ROK civilians, ROK military