APTAMERS AGAINST *P. FALCIPARUM* HISTIDINE RICH PROTEIN 2 AS A NEW APPROACH TO MALARIA DIAGNOSIS

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Malaria is a life-threatening infectious disease caused by the protist Plasmodium, of which the species Plasmodium falciparum is the most severe. Approximately half of the world's population is at risk of malaria and most of the malaria cases occur in the developing world, where inadequate access to diagnostic tools leads to misdiagnosis or overuse of anti-malaria drugs. Although antibody-based rapid diagnostic tests have been developed they continue to have a number of problems, therefore point of care malaria diagnostics is an ongoing challenge. We are developing a new approach for malaria diagnosis by using aptamer technology. Here, we describe the purification of *P. falciparum* histidine rich protein 2 (HRP2), a diagnostic marker of P. falciparum infection. We also describe the selection and characterisation of aptamers against HRP2 carried out by Systematic Evolution of Ligands by Exponential Enrichment (SELEX). This work lays a foundation for the further development nucleic acid aptamers for malaria diagnosis.