

POSTER PRESENTATIONS

Open Access

Anti-peptide antibodies in the diagnosis of malaria

J P Dean Goldring*, Ramona Hurdayal, David Choveaux

From Parasite to Prevention: Advances in the understanding of malaria
Edinburgh, UK. 20-22 October 2010

Lactate dehydrogenase is one of the antigens targeted in lateral flow immunochromatographic rapid diagnostic tests for the diagnosis of malaria. Unique diagnostic peptide targets based on the respective amino-acid sequences to differentiate between *P. falciparum* and *P. vivax* lactate dehydrogenase were chosen, synthesized and coupled to rabbit albumin carrier. Anti-peptide antibodies were raised in chickens against the peptides and against each of the recombinant proteins and affinity purified. An antibody against a common epitope detected recombinant *P. falciparum*, *P. vivax* and *P. yoelii* and native *P. falciparum* and *P. vivax* protein lactate dehydrogenase. Antibodies against species specific lactate dehydrogenase epitopes differentiated between *P. falciparum* and *P. vivax* lactate dehydrogenase. The study supports an anti-peptide antibody approach for the design of malaria diagnostic reagents.

Published: 20 October 2010

doi:10.1186/1475-2875-9-S2-P12

Cite this article as: Dean Goldring et al.: Anti-peptide antibodies in the diagnosis of malaria. *Malaria Journal* 2010 **9**(Suppl 2):P12.

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit



Ikechukwu Achilonu Biochemistry, University of KwaZulu-Natal,
Pietermaritzburg, 3209, South Africa



© 2010 Dean Goldring et al; licensee BioMed Central Ltd. This is an open access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/2.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.