

Southeast Asian ovalocytosis protects against *P. vivax* malaria

September 4 2012

A multinational group of authors, led by Ivo Mueller from the Walter & Eliza Hall Institute, Australia and the Papua New Guinea Institute of Medical Research, have found a strong association between Southeast Asian ovalocytosis, an inherited disorder that affects the shape of red blood cells, and protection against malaria caused by *Plasmodium vivax*.

The investigators genotyped 1975 children enrolled in three independent epidemiological studies conducted in the Madang area of Papua New Guinea for this common hemoglobin gene mutation, and assessed *P. vivax* infection and disease in the children.

The authors suggest that *P. vivax* malaria may have contributed to shaping the unique host genetic adaptations to [malaria](#) in Asian and Oceanic populations.

More information: Rosanas-Urgell A, Lin E, Manning L, Rarau P, Laman M, et al. (2012) Reduced Risk of Plasmodium vivax Malaria in Papua New Guinean Children with Southeast Asian Ovalocytosis in Two Cohorts and a Case-Control Study. *PLoS Med* 9(9): e1001305.
[doi:10.1371/journal.pmed.1001305](https://doi.org/10.1371/journal.pmed.1001305)

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Citation: Southeast Asian ovalocytosis protects against *P. vivax* malaria (2012, September 4)

retrieved 30 January 2024 from <https://medicalxpress.com/news/2012-09-southeast-asian-ovalocytosis-p-vivax.html>

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