

Polimorfisme gen K13 plasmodium falciparum dan gen Fc rii inang serta hubungannya dengan densitas parasit dan efikasi dihidroartemisinin piperakuin = Polymorphism of plasmodium falciparum k13 gene and human fc rii and its association with parasite density and efficacy of dihydroartemisinin piperquine / Sylvia Sance Marantina

Marantina, Sylvia Sance, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20423304&lokasi=lokal>

---

Abstrak

<b>ABSTRAK</b>

Sebanyak 120 sampel Dried Blood Spot (DBS) malaria falciparum yang diperoleh dari studi efikasi obat DHP pada 5 wilayah di Indonesia dianalisis dengan Polymerase Chain Reaction (PCR) dan sekuensing, untuk melihat varian SNPs K13 dan alel Fc&#947;RIIa -131 serta hubungannya dengan densitas parasit dan efikasi Dihidroartemisinin-Piperakuin. Hasil penelitian tidak menemukan mutasi gen K13 pada seluruh isolat P. falciparum yang diperiksa. Artemisinin masih efektif untuk pengobatan malaria di Indonesia. Analisis gen Fc&#947;RIIa menunjukkan bahwa genotip RH memiliki frekuensi yang paling tinggi (50,8%) dibandingkan RR (17,5%) dan HH (31,7%). Alel R131 gen Fc&#947;RIIa menunjukkan efek protektif terhadap High Density Parasitemia (HDP) (>5000 parasit/&#956;L; odds ratio [OR]= 0.133, 95% confidence interval [CI]= 0.053?0.334, P< 0.001) dan berkaitan dengan keberadaan gametosit yang lebih lama pada inang (> 72 jam.

<hr><i><b>ABSTRACT</b>

Relative Risk [RR]= 1,571, 95% confidence interval [CI]= 1,005?2,456, P= 0.090).;A total of 120 samples of Dried Blood Spot (DBS) falciparum malaria acquired from DHP drug efficacy studies in 5 regions in Indonesia were analyzed by Polymerase Chain Reaction (PCR) and sequencing, to look at variants of K13 SNPs and Fc&#947;RIIa-131 allele and its Association with Parasite Density and Efficacy of Dihydroartemisinin- Piperquine. No mutations in the K13 gene was found in any of the isolates examined. Artemisinin is still effective for the treatment of malaria in Indonesia. The Fc&#947;RIIa gene analysis indicated that genotype RH has the highest frequency (50.8%) compared to RR (17.5%) and HH (31.7%). Allele R131 showed a protective effect against High Density Parasitemia (HDP) (>5000 parasites/&#956;L; odds ratio [OR]= 0.133, 95% confidence interval [CI]= 0.053?0.334, P< 0.001) and associated with longer gametocytes carrier clearance time (> 72 hours; Relative Risk [RR]= 1,571, 95% confidence interval [CI]= 1,005?2,456, P= 0.090).</i>