(78.0%) could correctly state how ACT could be used in management malaria in children under five.

Conclusion: Due to high level of unacceptability and affordability ACT adoption for management of malaria in children less than five years is still at startling level among their mothers. However, ACT drugs should be made acceptable, affordable and available by government and partners in management of malaria among children in Africa.

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APOBEC3G and G-to-A hypermutation in Asian children with different HIV/AIDS disease progression

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Background: APOBEC3G potently controls HIV replication by introducing G-to-A hypermutation. Genetic variants of *APOBEC3G*, 186H/R is associated with HIV/AIDS disease progression in adults. However, the details of its effect in children remain unclear.

Methods & Materials: Rapid progressors (RPs) was defined as children who had AIDS-related symptoms (PCP, HIV encephalopathy) before their second birthday. Long-term non-progressors (LTNPs) were defined as children, aged>8 years, maintaining CD4%≥25%, and without cART. RPs and LTNPs were of 630 perinatally infected children who were enrolled in the multicenter studies of Thailand and Cambodia.

APOBEC3G genotypes were determined by PCR-restriction fragment length polymorphism method using genomic DNA samples. APOBEC3G-mediated hypermutations were analyzed by sequencing of the *vif*/*vpu* genes from proviral DNAs.

Results: A total of 14 RPs and 24 LTNPs were enrolled. 50% of RP and 67% of LTNP were female (p=0.3). Median ages at sample collection were 11.6 (4.7-15.1) years and 11.3 (10.0-12.3) years (p=0.3), for the RPs and LTNPs, respectively. In the RP group, median age at the first AIDS-related symptom was 0.7 (0.4-1.2) years.

Frequency of *APOBEC3G 186H/R* genotypes, AA:AG:GG, in the RPs was 100:0:0% whereas 83:17:0% (p=0.3) in the LTNPs. Hypermutation of the *vif*-coding region were observed in none of the RP and 12% of the LTNP (p=0.5). In contrast, hypermutations at the *vpu* genes were not detected in both groups' proviral DNAs.

Conclusion: We observed no significant associations of the *APOBEC3G* genotypes and G-to-A hypermutation rates between Asian children with different profiles of HIV/AIDS disease progression.

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Safety of atazanavir/ritonavir with tenofovir disoproxil fumarate in HIV-infected adolescents

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Background: Atazanavir/ritonavir(ATV/r) and tenofovir disoproxil fumarate(TDF) are recommended once-daily antiretroviral therapy, particularly for second-line therapy. Their concomitant use can lead to decrease in ATV and increase in TDF plasma concentration. There are limited data of efficacy and safety of their co-administration in children and adolescents.

Methods & Materials: Nineteen HIV-infected Thai children aged 6-18years, body weight 25-50 kg, and total bilirubin<2 mg/dL were enrolled. They were either PI-experienced with HIV-RNA<50copies/ml or PI-naïve with HIV-RNA≥1,000copies/ml. ATV(Reyataz®) 200 mg/capsule with generic ritonavir 100 mg/tablet, produced by the Thai Government Pharmaceutical Organization, were co-administered with TDF and lamivudine once daily. CD4, HIV-RNA, total bilirubin, creatinine, lipids, lumbar