

events. Many DLT are unrelated to hydroxyurea including thrombocytopenia (33%) with splenomegaly, followed by anemia (26%) with malaria. Severe neutropenia (ANC <0.5 x 109/L) was very rare (5 events) with no neutropenic infections.
Conclusions: Hydroxyurea is safe, well-tolerated, and effective for children in REACH. Hydroxyurea escalation to MTD with further dose optimization is associated with improved laboratory and clinical responses, but no increased toxicity. Routine CBC monitoring at 3-month intervals is sufficient and extension to longer intervals may be appropriate. Hydroxyurea dosing at 25-30 mg/kg/day is feasible and safe in sub-Saharan Africa and provides optimal treatment benefits.

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