Appendix 10. Research Gaps in Pediatric Fever and Neutropenia

Identification of a validated high-risk stratification schema for pediatric fever and neutropenia
Determination of the incremental value of a peripheral blood culture in addition to central venous catheter cultures of an adequate volume in children with fever and neutropenia
Identification of the optimal type and frequency of re-evaluation (for example, daily or every second day telephone contact or clinic visit) for pediatric outpatients with low-risk fever and neutropenia
Determination of the optimal treatment regimen for microbiologically documented sterile site infections during fever and neutropenia
Identification of the optimal frequency of blood culture sampling in persistently febrile pediatric patients with neutropenia who are either clinically stable or unstable
Determination of the optimal duration of antibiotic therapy for patients with high-risk fever and neutropenia without bone marrow recovery for prolonged periods
Determination of whether a strategy of routine galactomannan screening in IFD high-risk children is cost-effective and results in better clinical outcomes compared to a strategy without screening
Determination of the clinical utility and optimal cut-off of ß-D-glucan testing in IFD high-risk children
Determination of the clinical utility of routine sinus imaging in children being evaluated for IFD
Determination of the safety and efficacy of a pre-emptive antifungal approach in IFD low-risk and IFD high-risk children
Identification of the optimal investigation and treatment for viral infections in children with fever and neutropenia

Abbreviation: IFD – invasive fungal disease