
Appendix 1: Biological specimens

Plans for collection, laboratory evaluation, and storage of biological specimens for genetic or molecular analysis in this trial/future use:

When routine samples (blood, joint fluid, bone biopsy, throat swabs or any other material) are collected, extra material will be collected to test and improve diagnostic tools in children with infections. Samples will only be obtained in addition to routine samples, i.e. blood will be obtained at the same time as routine blood samples without extra cannulations and joint fluid or bone material will only be obtained if joint puncture or bone biopsy is performed according to the national guideline for pediatric bone and joint infections. The maximum volume of blood taken for analysis is 2 ml/kg/day, the maximum volume of joint fluid is 10 ml (in addition to routine analysis) and the maximum number of bone biopsies is 2 (in addition to routine biopsies). These samples will be stored and analyzed according to the "CHILD" protocol approved by the Danish National Ethics Committee (protocol no. H-18065635). According to the "CHILD" protocol, these samples will be analyzed for pathogen-targeted PCR, host transcriptomics and other -omics, inflammatory parameters (cytokines and their receptors, immunomodulatory agents), and antibiotic concentrations. No analysis on the human genome of the child or adolescent will be performed. The samples will be saved in a research biobank until 31.12.2029. The remaining material will be transferred to a biobank and might be used for future research projects, but only after additional approval from the Ethics Committee and the Danish data protection agency.