



WP4 Microbiology Update

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- ▶ D4.1 - Feasibility questionnaire to collect data on local lab methods to detect respiratory pathogens, associated antibiotic resistance and local prevalence
 - ▶ Sent to all 5 sites (8 contacts) – Oct-2019 to Jan-2020; completed by 3 sites (4 contacts)
 - ▶ Reminders sent to remaining 2 sites – February 2020
 - ▶ Report on methods at local labs to detect respiratory pathogens – based on data from 5 sites – TBD March 2020

Methods for identification/detection of pathogens

Site	Culture diagnostics	Automated methods identification	Molecular diagnostics
Africa Health Research Institute - King Edward VIII Hospital	x	x	x
Mulago Hospital, Kampala	x	x	
University of Zimbabwe Clinical Research Centre (UZCRC)	x		

Methods for antimicrobial susceptibility testing

Site	Disc diffusion	MIC	Molecular methods
Africa Health Research Institute - King Edward VIII Hospital	x	x	x
Mulago Hospital, Kampala	x	x	
University of Zimbabwe Clinical Research Centre (UZCRC)	x		

Average time to obtain approval from regulatory institutions for export of samples - 6-12 weeks

Name of Event - Date - Place



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- ▶ D4.2 - Develop and organize postgraduate/summer school training program on diagnostic molecular methods in microbiology
 - ▶ Part of capacity building activities in PediCAP
 - ▶ 17-29 August 2020, Antwerp, Belgium
 - ▶ AMR track incl. talks and hands-on work on basic and advanced methods for susceptibility testing, quality control implementation, and whole-genome sequencing
 - ▶ AMS track incl. infection control, antibiotic use and PPS study
 - ▶ Participants also from PANDORA and ALERRT; questionnaire to be sent to 30 contacts from these networks
 - ▶ Programme will be shaped based on the answers from the feasibility questionnaire
 - ▶ Next steps: identify and invite participants, finalize programme

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- ▶ D4.3 - Phenotypic/genotypic confirmation of susceptibility profile and serotypes of isolates from the trial
 - ▶ Work on a draft of the PediCAP laboratory manual for sample collection
- ▶ D4.4 - Microbiome/resistome analysis and shotgun metagenomics sequencing on rectal and NP samples
 - ▶ Work on internal validation of DNA/RNA shield storage medium that will be provided to sites for collection of nasopharyngeal and peri-rectal swabs
 - ▶ Optimization of the shotgun metagenomics protocol for swabs
 - ▶ Optimization of the bioinformatics pipelines that will be used for data analysis
- ▶ Wording for biobanking in site contract and MTAs
 - ▶ Work with PENTA and MRC on site contract template and MTAs

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▶ Upcoming activities:

- ▶ Validate and choose optimal DNA/RNA shield storage medium to be used in the trial – March 2020
- ▶ Finalize laboratory manual – March 2020
- ▶ Report on methods at local labs to detect respiratory pathogens (D4.1) - March 2020
- ▶ Training of sites on microbiology procedures for the trial - TBD
- ▶ Prepare and organize summer school (D4.2) – August 2020

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