**Table 1.** On-going studies addressing research questions of antimicrobial resistance after macrolide mass treatment

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| **NCT Number** | **Country** | **Target disease** | **Part of MORDOR**  | **Type of study** | **Target age group** | **Number of AZM doses/ course**  | **Number of AZM courses** | **Microbiology endpoints** | **Genotypic methods used** |
| NCT03683667 | Bangladesh | Malnutrition/ Stunting | No | cRCT | 6-12m old children | 1 | 2 (6 and 9m) | Enteropathogen burden (7x at age 6-18m), Gut microbiota composition (as above), AMR of *E. coli* and *S. pneumoniae* at 6, 9, 12, 15 and 18m of age in participating children | qPCR, 16S ribosomal RNA sequencing |
| NCT03682653 | Burkina Faso | Mortality | Yes | RCT | 8-27d old children | 1 | 1 (during newborn period) | None specified |  |
| NCT03676764 | Burkina Faso | Mortality  | Yes | cRCT |  1-60m old children and those receiving first DTP vaccine (5-8w old children) | 1 | 1 and 2x/year for older children | Carriage of *S. pneumoniae*  and nasopharyngeal macrolide resistance at 36m post exposure, proportion of *E. coli* resistant to macrolides and other key antibiotics at 36m post exposure, microbial diversity in the nasopharyngeal and intestinal microbiome at 36m post exposure | Next generation sequencing (not further specified) |
| NCT03676751 | Burkina Faso | Growth & Development | Yes | RCT | 8 day to 59m old children | 1 | 1 | Intestinal microbial diversity at 6m post exposure | Targeted PCR and next generation sequencing (not further specified) |
| NCT03676140 | Papua New Guinea | Trachoma/ NTD | No | cRCT | Persons older than 5y of age in randomized communities | 1 | 1 | None specified |  |
| NCT03570814 | Ethiopia | Trachoma/ NTD | No | cRCT | Persons older than 5y of age in randomized communities | 1 | 1 | None specified |  |
| NCT03568643 | Niger | Malnutrition/ Stunting | No | RCT | 6-59m old children | 1 | 1 | None specified |  |
| NCT03564652 | Pakistan | Malnutrition/ Stunting | No | RCT | (pregnant women), infants 42d of age | 1 | 1 | Enteropathogen burden at 40-42 and 56d of age | Multiplex PCR and metagenomics (not further specified) |
| NCT03523156 | Ethiopia | Trachoma | No | cRCT | 6m to 9 year old children | 1 | 1 (MDA annual) or 3 (MDA annual plus 2x targeted) | None specified beyond chlamydial infections (not AMR)  |  |
| NCT03490123 | Papua New Guinea | Yaws | No | cRCT | older than 6m | 1 | 3 | Macrolide resistance in *T.p.pertenue* |  |
| NCT03474276 | MadagascarNiger, CAR, Senegal | Malnutrition/ Stunting | No | RCT | 6 to 24m old children | 3 | 1 | Comparison of OTU composition of stool according to nutritional status (at baseline, 3 and 6m post exposure) | Next generation sequencing (detailed description) |
| NCT03338244 | Original MORDOR sites | Mortality | Yes | cRCT | 1 to 60m of age | 1 | 2x/y | Macrolide resistance 18m post exposure in nasopharyngeal and rectal swabs, microbial composition of stool at 18m, enteropathogen burden at 18m | Metagenomic deep sequencing for microbial composition; Resistance detected by standard phenotypic methods |
| NCT03335072 | Ethiopia | Trachoma | No | cRCT | All persons in randomized communities eligible for MDA according to WHO guideline | 1 | 4x/y | None specified beyond chlamydial infections (not AMR)  |  |
| NCT03268902 | Tanzania | Malnutrition/ Stunting | No | RCT | up to 14 days old | 1 | 6, 9, 12 and 15 months | Enteropathogen burden (5x between 6 and 18m), intestinal microbiota composition (4x between 6 and 18m) | Not specified |
| NCT03199547 | The Gambia and Burkina Faso | Neonatal sepsis | No | RCT | Women in labour | 1 | 1 | EONS (culture confirmed) and LONS (culture confirmed) |  |
| NCT03187834 | Burkina Faso | Growth & Development | No | cRCT (households) | 6 to 59m old children | 5 | 1 | Nasopharyngeal and intestinal microbiome (day 9 post exposure) | DNA sequencing (not further specified) |
| NCT03032042 | Ethiopia | Helminthic infection | No | RCT | 1 to 60m of age | 1 | 1 | Microbial diversity in intestinal microbiome 7d post exposure |  |
| NCT02754583 | Ethiopia | Trachoma | No | RCT | All persons in randomized communities | 1 (MDA, annual), 1 (targeted) | 1 (MDA, annual), 4 (quarterly) | Nasopharyngeal pneumococcal macrolide resistance (12, 24, 36m post exposure), intestinal microbiome at 12 months post exposure (sub study) | Not specified |
| NCT02414399 | Kenya | Mortality | No | RCT | 1 to 59m of age  | 5 | 1 | Prevalence of enteric pathogen and pneumococcal carriage (6m post exposure), proportion of beta-lactam or macrolide resistance or both (6m post exposure) |  |
| NCT02048007 | Malawi, Niger, and Tanzania | Mortality | Yes | cRCT | 1 to 60m of age | 1 | 2x/y | Pneumococcal macrolide resistance at 24 and 48m, macrolide resistance (genetic) in stool and nasopharynx at 24 and 48m, carriage of resistant pneumococcus at 6 to 24m, proportion of rectal/stool isolates and *E. coli* isolates resistant to macrolides and other antibiotics at 6 to 24m, MRSA (NP) at 24m, carriage of *S. aureus* resistant to macrolides and other antibiotics at 6 to 24m, various deep sequencing endpoints.  | Metagenomics (not further specified) |

Footnotes:

Abbreviations: 1d, 1 day; 1w, 1 week; 1m, 1 month; 1y, 1 year; AMR, antimicrobial resistance; CAR, Central African Republic; EONS, early-onset neonatal sepsis, LONS, late-onset neonatal sepsis; OTU, Operational Taxonomic Unit; RCT, randomized controlled trial; WHO, world health organization