

Supplementary Table 2 –Mass drug administration (MDA) clinical trials with mortality endpoints.

Clinical trial name (Clinical trial ID)	Country	Enrollment year	Under-five mortality rate (Point estimate)	Under-five mortality rate (Upper bound)	Infant mortality rate (Point estimate)	Infant mortality rate (Upper bound)	Mortality results
Trachoma Amelioration in Northern Amhara (TANA, NCT00322972)	Ethiopia	2006	103.3	111.3	66.4	70.9	Mortality odds ratio comparing treatment to control group: 0.51 (95% <i>CI</i> : 0.29–0.90, <i>P</i> = 0.02) [1]
Tripartite International Research for the Elimination of Trachoma (TIRET [TANA II] NCT01202331)	Ethiopia	2010	82.5	89.9	54.6	58.8	Not available
Mortality Reduction After Oral Azithromycin: Mortality Study (MORDORI Mort, NCT02047981)	Niger	2014	127.8	142.9	63.9	69.2	Under-five mortality rate 18.1% lower (95% <i>CI</i> : 10.0–25.5, <i>P</i> < 0.001) in azithromycin versus placebo group Aggregate of Malawi, Niger, and Tanzania: under-five mortality rate 13.5% lower (95% <i>CI</i> : 6.7–19.8, <i>P</i> < 0.001) in azithromycin versus placebo group [2]

Mortality Reduction After Oral Azithromycin: Mortality Study (MORDORI Mort, NCT02047981)	Malawi	2014	59.6	67.2	40.3	44.4	Under-five mortality rate 5.7% lower (95% <i>CI</i> : -9.7–18.9, <i>P</i> = 0.45) in azithromycin versus placebo group Aggregate of Malawi, Niger, and Tanzania: under-five mortality rate 13.5% lower (95% <i>CI</i> : 6.7–19.8, <i>P</i> < 0.001) in azithromycin versus placebo group [2]
Mortality Reduction After Oral Azithromycin: Mortality Study (MORDORI Mort, NCT02047981)	Tanzania	2014	56.7	62.5	40.1	43.4	Under-five mortality rate 3.4% lower (95% <i>CI</i> : -21.2–23.0, <i>P</i> = 0.77) in azithromycin versus placebo group Aggregate of Malawi, Niger, and Tanzania: under-five mortality rate 13.5% lower (95% <i>CI</i> : 6.7–19.8, <i>P</i> < 0.001) in azithromycin versus placebo group [2]
Mortality Reduction After Oral Azithromycin Contingency: Mortality Study (NCT03338244)	Niger	2017	124.3	141.7	62.7	68.8	Positive, significant in communities receiving MDA-azithromycin for the first time
Community Health Azithromycin Trial in Burkina Faso (CHAT, NCT03676764)	Burkina Faso	2019	87.3	119.5	53.8	67.3	Mortality incidence rate ratio 0.82 (95% <i>CI</i> : 0.67–1.02, <i>P</i> = 0.07) in azithromycin versus placebo group [3]

Effects of Mass Drug Administration of Azithromycin on Mortality and Other Outcomes Among 1-11 Month Old Infants in Mali (LAKANA, NCT04424511)	Mali	2020	99.7	122.1	62.9	73.1	Not available
Azithromycin for Child Survival in Niger: Mortality and Resistance Trial (AVENIR, NCT04224987)	Niger	2020	121.0	144.1	61.6	69.6	Under-five mortality 14% lower (95% <i>CI</i> : 7–22, $P < 0.001$) in azithromycin versus placebo groups [4]
Infant Mortality Reduction by the Mass Administration of Azithromycin (MIRAMA, NCT04716712)	Burkina Faso	2021	81.4	119.4	51.2	67.3	Not available
Azithromycin for Child Survival in Niger: Programmatic Trial (AVENIR Programmatic Trial, NCT05288023)	Niger	2022	117.3	147.7	60.3	70.8	Not available

Bolded numbers indicate values which are above the designated WHO threshold (under-five mortality rates > 80 deaths per 1000 live births or infant mortality rates > 60 deaths per 1000 live births). *Estimated national under-five and infant mortality rates were sourced from the 2023 UN IGME *Levels and Trends in Child Mortality* report for each year in which enrollment began [5].

- [1] Porco TC, Gebre T, Ayele B, House J, Keenan J, Zhou Z, et al. Effect of mass distribution of azithromycin for trachoma control on overall mortality in Ethiopian children: a randomized trial. *JAMA* 2009;302:962–8. <https://doi.org/10.1001/jama.2009.1266>.
- [2] Keenan JD, Bailey RL, West SK, Arzika AM, Hart J, Weaver J, et al. Azithromycin to Reduce Childhood Mortality in Sub-Saharan Africa. *N Engl J Med* 2018;378:1583–92. <https://doi.org/10.1056/NEJMoa1715474>.
- [3] Oldenburg CE, Ouattara M, Bountogo M, Boudo V, Ouedraogo T, Compaoré G, et al. Mass Azithromycin Distribution to Prevent Child Mortality in Burkina Faso: The CHAT Randomized Clinical Trial. *JAMA* 2024;331:482. <https://doi.org/10.1001/jama.2023.27393>.
- [4] O'Brien KS, Arzika AM, Amza A, Maliki R, Aichatou B, Bello IM, et al. Azithromycin to Reduce Mortality — An Adaptive Cluster-Randomized Trial. *N Engl J Med* 2024. <https://doi.org/10.1056/NEJMoa2312093>.
- [5] United Nations Inter-agency Group for Child Mortality Estimation (UN IGME). Levels & Trends in Child Mortality Report 2023. United Nations Children's Fund (UNICEF); 2024.