Supplementary Information

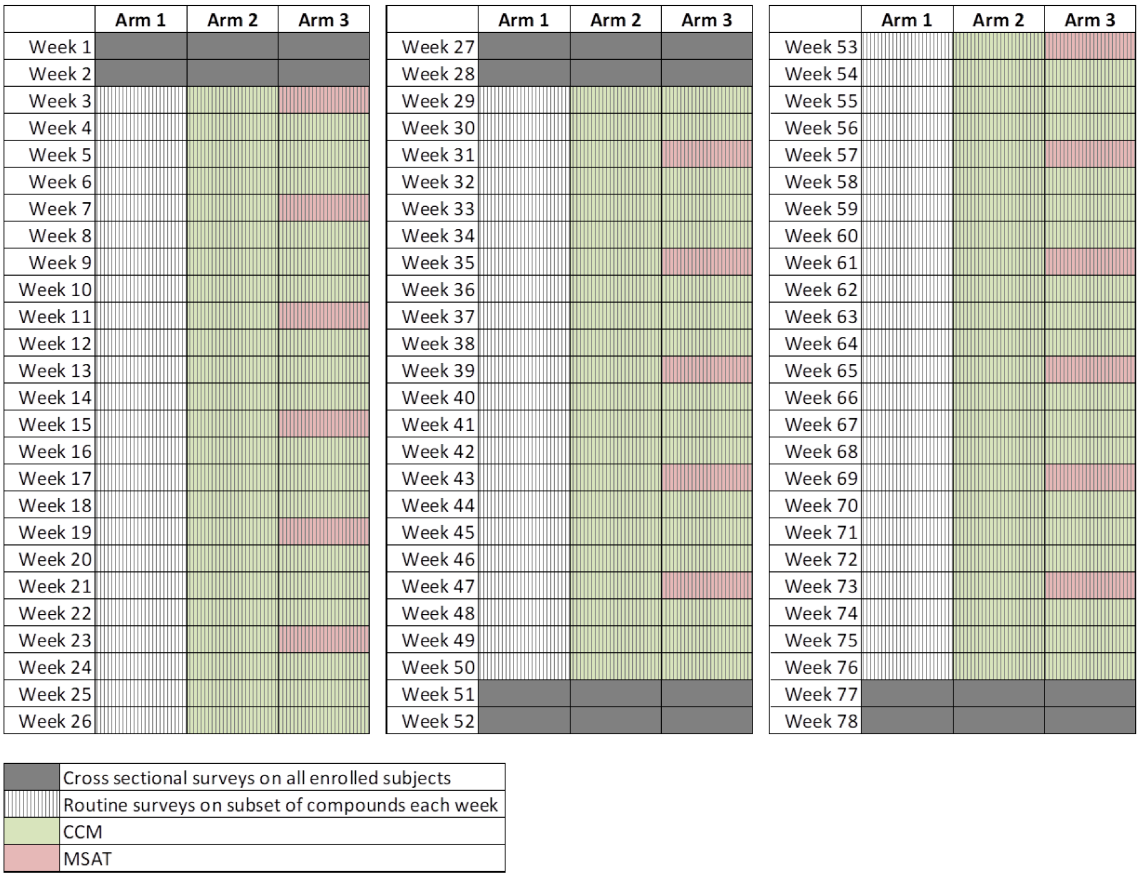

Figure S1. Timetable of trial activities
CCM = enhanced community case management; MSAT = monthly screening and treatment

Data category	Information
Primary registry and trial identifying number	ClinicalTrials.gov: NCT03705624
Date of registration in primary registry	July 19, 2018
Secondary identifying numbers	INDIE-1a
Source(s) of monetary or material support	The Bill and Melinda Gates Foundation
Primary sponsor	London School of Hygiene and Tropical Medicine Keppel Street London WC1E 7HT Tel: +44 207 927 2626 Email: RGIO@lshtm.ac.uk
Secondary sponsor(s)	N/A
Contact for public queries	Teun Bousema, PhD +31 0243617574 (teun.bousema@radboudumc.nl) Katharine Collins, PhD +31 0243613663 (katharine.collins@radboudumc.nl) Chris Drakeley, PhD +44 02079272289 (chris.drakeley@lshtm.ac.uk) Alfred Tiono, MD, PhD +226 50324695 (t.alfred@fasonet.bf)
Contact for scientific queries	TeunBousema, PhD +31 243617574 (teun.bousema@radboudumc.nl) Chris Drakeley, PhD +44 2079272289 (chris.drakeley@lshtm.ac.uk) Alfred Tiono, MD, PhD +226 50324695 (t.alfred@fasonet.bf) Katharine Collins, PhD+31 243613663 (katharine.collins@radboudumc.nl)
Public title	P. falciparum Infection Dynamics and Transmission to Inform Elimination (INDIE 1a)
Scientific title	A cluster-randomized trial investigating the impact of enhanced community case management and monthly screening and treatment on the transmissibility of malaria infections in Burkina Faso
Countries of recruitment	Burkina Faso
Health condition(s) or problem(s) studied	Malaria
Intervention(s)	Arm 1 (control): Standard of care • Standard of care with passively monitored malaria incidence Arm 2 (intervention): CCM • Standard of care plus enhanced Community Case Management for Malaria (CCM) involving weekly active screening for fever. A measured temperature ≥37.5°C or reported fever in last 24h will prompt screening with a conventional rapid diagnostic test (RDT). RDT positive individuals will be treated with artemether-lumefantrine according to national guidelines Arm 3 (intervention): CCM + MSAT • Standard of care with enhanced CCM plus monthly screening and treatment regardless of symptoms using a conventional RDT (MSAT). RDT positive individuals will be treated with artemether-lumefantrine according to national guidelines.
Key inclusion and exclusion criteria	Inclusion Criteria: 1. Participants should be permanent residents of the compound 2. Participants should be willing to participate in repeated assessments of health and infection status and willing to donate a maximum of 37mL of blood (children <10 years of age) or 52mL of blood (older individuals) during an 18-month period Exclusion Criteria: 1. Any (chronic) illness that would affect with study participation 2. Pre-existing severe chronic health conditions

	3. Current participation in malaria vaccine trials or participation in such trials in the last 2 years 4. History of intolerance to artemether-lumefantrine
Study type	Interventional Allocation: randomized Intervention model: Cluster randomized trial Masking: none (open label) Primary purpose: Diagnostic
Date of first enrolment	June 2018
Target sample size	900
Recruitment status	Recruiting
Primary outcome(s)	Parasite prevalence and density between arms by molecular detection at the end of study cross-sectional survey [Time Frame: Month 18 (end of second transmission season; January-February 2020)].
Key secondary outcomes	1. Parasite prevalence and density by molecular detection at the end of year 1 cross-sectional survey [Time Frame: Month 6 (end of first transmission season; January-February 2019)]. 2. Parasite prevalence and density by molecular detection at the end of the dry season cross-sectional survey [Time Frame: Month 12 (prior to second transmission season; June 2019)]. 3. Gametocyte prevalence and or density by molecular methods at the end of study cross-sectional survey [Time Frame: Month 18 (end of second transmission season; January-February 2020)]. 4. Gametocyte prevalence and or density by molecular methods at the end of year 1 cross-sectional survey [Time Frame: Month 6 (end of first transmission season; January-February 2019)]. 5. Gametocyte prevalence and or density by molecular methods at the end of the dry season cross-sectional [Time Frame: Month 12 (prior to second transmission season; June 2019)]. 6. Gametocyte prevalence and or density by molecular methods among *P. falciparum* infections during all visits in the study [Time Frame: Throughout study, an average of 18 months]. 7. The number of incident infections/clinical incidence detected during CCM, MSAT and passive case detection [Time Frame: Throughout study, an average of 18 months]. 8. Infectivity to mosquitoes of *P. falciparum* infections [Time Frame: Throughout study, an average of 18 months].

Table S1. World Health Organization Trial Registration Data Set