

Table S1. Timeline for different interventions. In Stages II and III, IRS was applied 6 months after the start of interventions

Time (days)	Stage I	Stage II	Stage III	Simulations
0	LLIN			Figure S1
	PBO-LLIN			Figure S1
	LLIN + IRS			Figure S2
366		PBO-LLIN		Figure S3
		PBO-LLIN + LLML		Figure S3
		PBO-LLIN + IRS		Figure S3
731			PBO-LLIN	Figures S4/S5
			PBO-LLIN + LLML + IRS	Figure S4
			PBO-LLIN + IRS + LLML	Figure S5

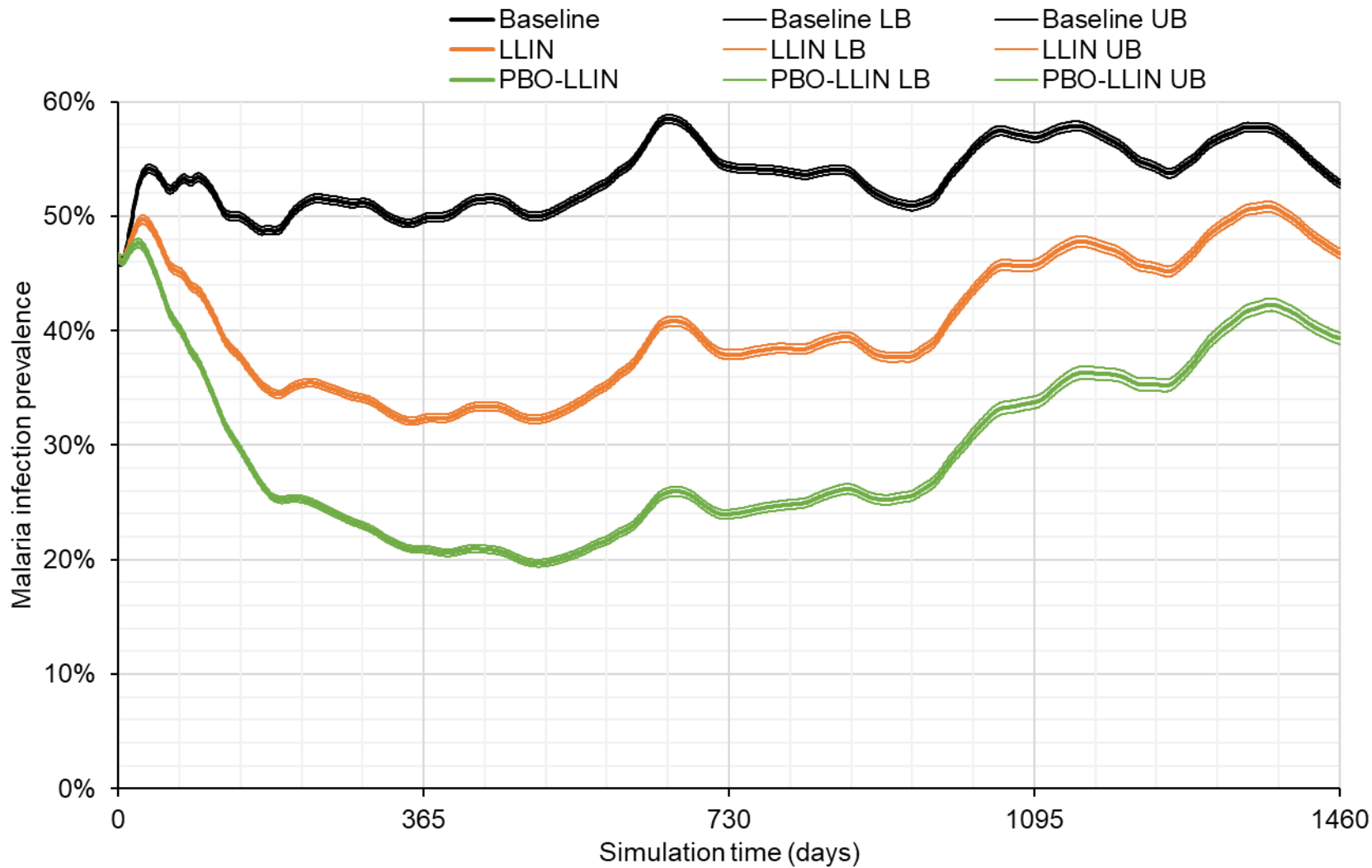


Figure S1. Simulated malaria infection prevalence rates at baseline, long-lasting insecticidal net (LLIN) intervention and piperonyl butoxide-treated LLIN (PBO-LLIN) intervention. LB/UB represents lower/upper boundary of 95% confidence interval.

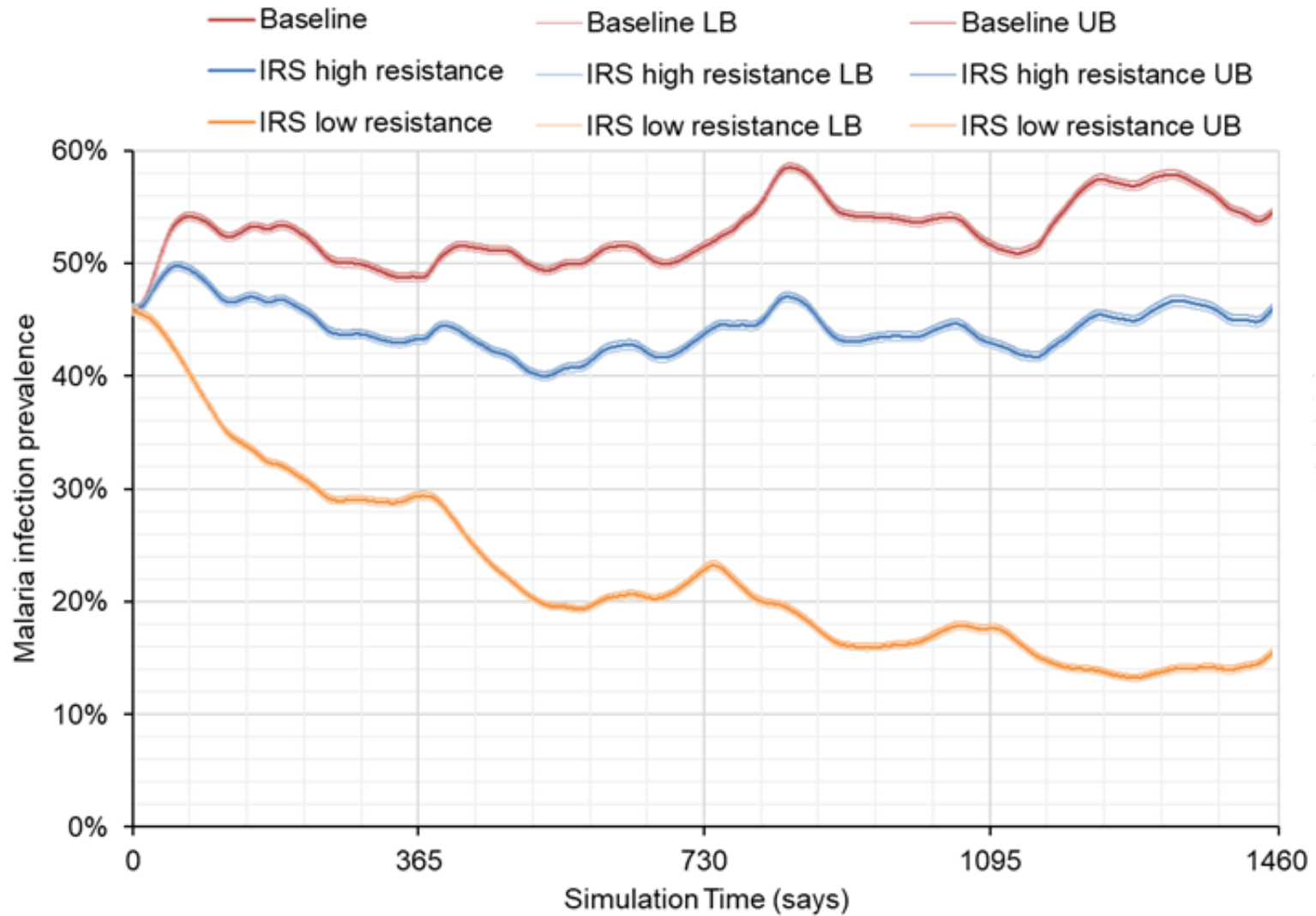


Figure S2. Simulated malaria infection prevalence rates at baseline and indoor residual spraying (IRS) using high vector-resistant insecticides or alternative low vector-resistant insecticides. LB/UB represents lower/upper boundary of 95% confidence interval.

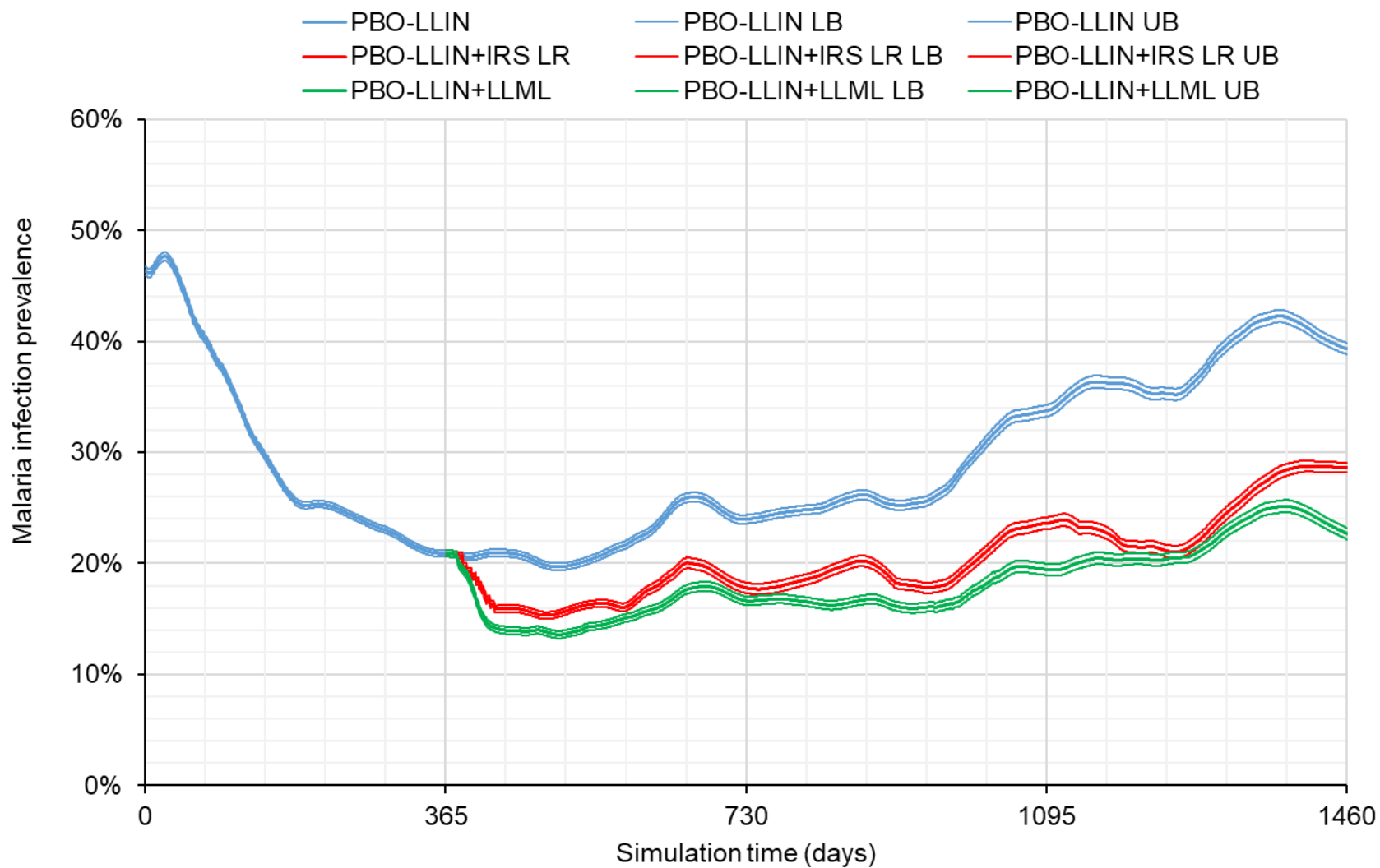


Figure S3. Simulated malaria infection prevalence rates with piperonyl butoxide-treated long-lasting insecticidal net (PBO-LLIN) intervention as baseline, against PBO-LLIN plus indoor residual spraying (PBO-LLIN+IRS) or PBO-LLIN plus long-lasting microbial larviciding (PBO-LLIN+LLML). LB/UB represents lower/upper boundary of 95% confidence interval. IRS LR represents IRS using low vector-resistant insecticides.

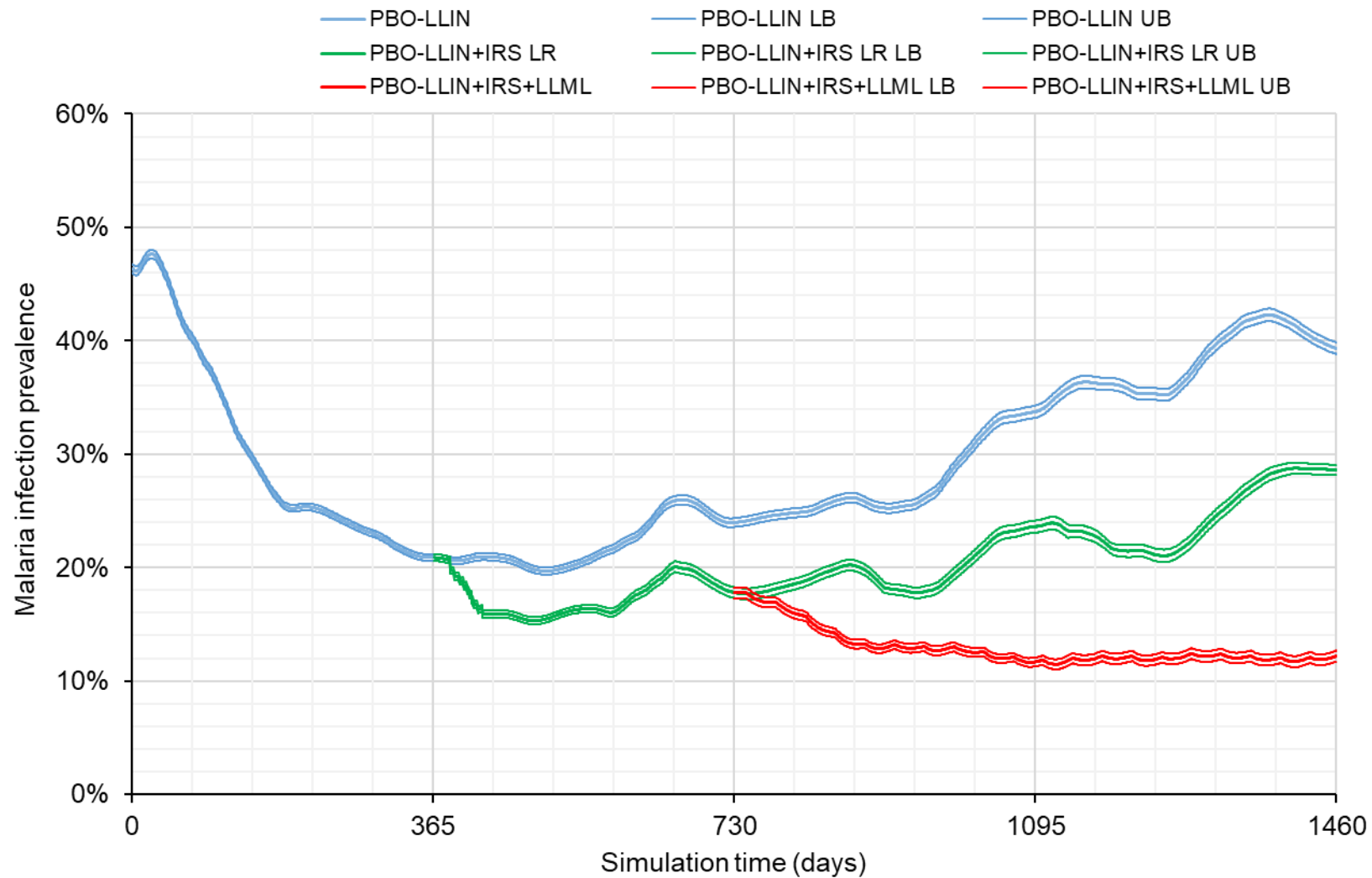


Figure S4. Simulated malaria infection prevalence rates with piperonyl butoxide-treated long-lasting insecticidal net (PBO-LLIN) intervention as baseline, against PBO-LLIN plus indoor residual spraying with alternative insecticides (PBO-LLIN+IRS LR), followed by adding long-lasting microbial larviciding (PBO-LLIN+IRS+LLML). LB/UB represents lower/upper boundary of 95% confidence interval.

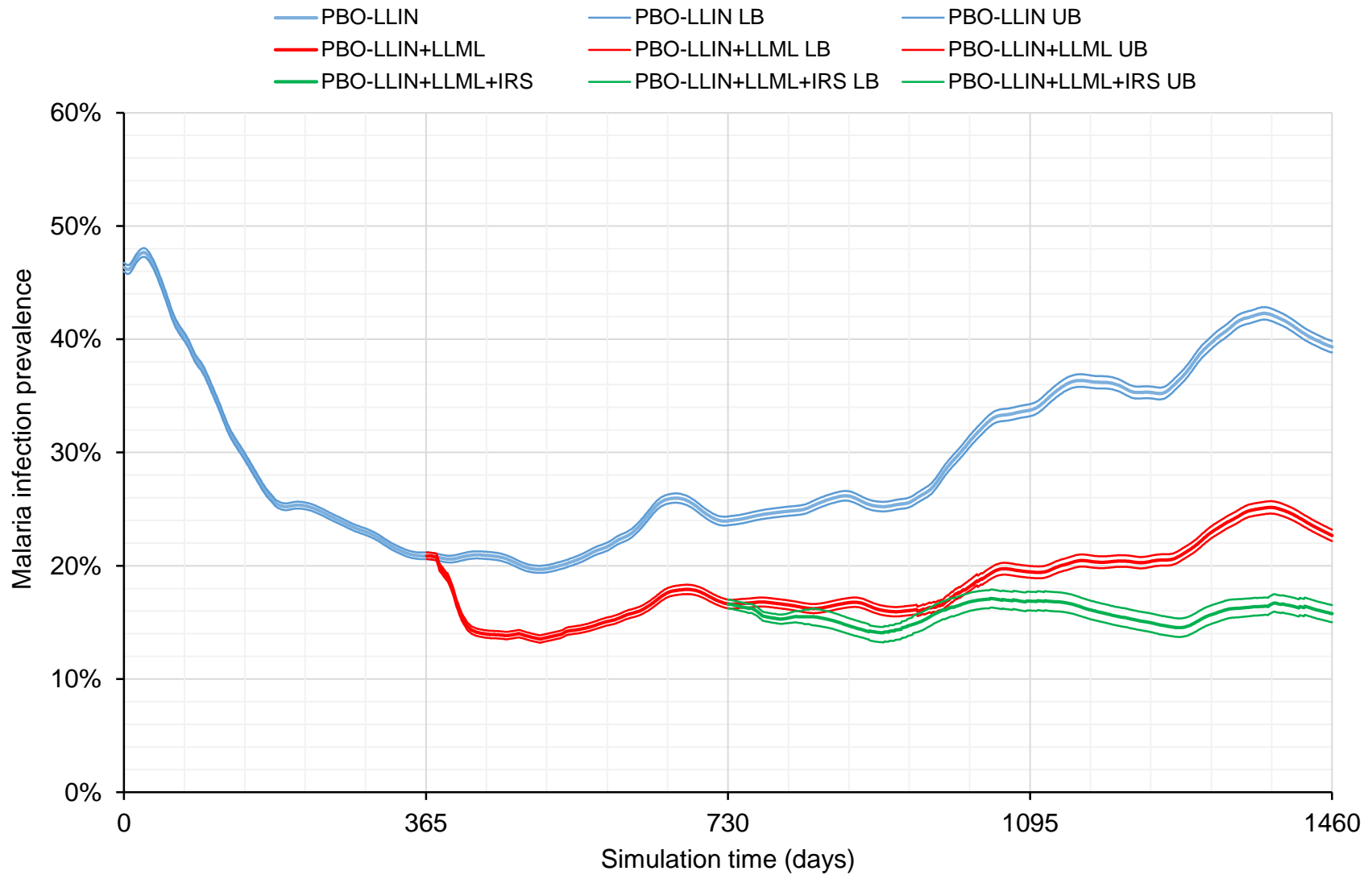


Figure S5. Simulated malaria infection prevalence rates with piperonyl butoxide-treated long-lasting insecticidal net (PBO-LLIN) intervention as baseline, against PBO-LLIN plus long-lasting microbial larviciding (PBO-LLIN+LLML), then followed by adding indoor residual spraying with alternative insecticides (PBO-LLIN+LLML+IRS LR). LB/UB represents lower/upper boundary of 95% confidence interval.