

Annex 2: parameter description and their corresponding value		
S/N	Parameter	Value
1	χ_h : Recruitment rate of humans	33,476
2	θ : Waning immunity rate of recovered to susceptible humans	0.014
3	μ_h : Natural death rate of humans	0.0015
4	σ_h : Transfer rate from infected to treated humans	0.5
5	δ_h : Death rate due to malaria in humans	0.01
6	α_h : Recovery rate from treated to recovered humans	0.785
7	β_v : Transmission rate from susceptible to infected vectors	0.714
8	χ_v : Recruitment rate of vectors	50,559,283
9	μ_v : Natural death rate of vectors	0.06