

## **Supplementary Online Material**

### **The rates of acquisition and clearance of pneumococcal serotypes in the nasopharynges of children in Kilifi District, Kenya.**

Osman Abdullahi, Angela Karani, Caroline Tigoi, Daisy Mugo, Stella Kungu, Eva Wanjiru, Jane Jomo, Robert Musyimi, Marc Lipsitch, J. Anthony G. Scott

#### **Contents**

Table S1. Rates of clearance and acquisition of pneumococcal carriage and carriage duration by age

Table S2. Rates of Immune clearance and total clearance by age

Figure S1. Scatter graphs and linear fit for serotype-specific estimates of prevalence, clearance and acquisition.

**Table S1. Rates of clearance and acquisition of pneumococcal carriage and mean carriage duration by age**

Age (m)	N	Clearance		Carriage duration (days)		Acquisition	
		rate/day	95%CI	Point estimate	95%CI	rate/day	95%CI
3-5	78	0.0219	0.0163 - 0.0293	45.7	34.2 - 61.2	0.0568	0.0341 - 0.0949
6-11	220	0.0206	0.0131 - 0.0325	48.5	30.8 - 76.4	0.0782	0.0456 - 0.1341
12-17	225	0.0276	0.0175 - 0.0434	36.2	23.0 - 57.0	0.0786	0.0467 - 0.1323
18-23	230	0.0233	0.0149 - 0.0365	42.9	27.4 - 67.3	0.0564	0.0339 - 0.0937
24-29	202	0.0341	0.0217 - 0.0535	29.3	18.7 - 46.1	0.0702	0.0421 - 0.1171
30-35	199	0.0296	0.0188 - 0.0464	33.8	21.6 - 53.1	0.0525	0.0317 - 0.0872
36-41	180	0.0433	0.0275 - 0.0682	23.1	14.7 - 36.4	0.0803	0.0479 - 0.1347
42-47	190	0.0527	0.0334 - 0.0832	19.0	12.0 - 29.9	0.0834	0.0501 - 0.1390
48-53	186	0.0465	0.0295 - 0.0733	21.5	13.6 - 33.9	0.0651	0.0392 - 0.1080
54-59	158	0.0472	0.0298 - 0.0748	21.2	13.4 - 33.5	0.0498	0.0299 - 0.0829

**Table S2. Rates of Immune clearance and total clearance by age**

Age (m)	Immune Clearance		Total Clearance	
	Rate	95% CI	Rate	95% CI
3-5	0.0074	0.0125 - 0.0044	0.0219	0.0163 - 0.0293
6-11	0.0067	0.0152 - 0.0029	0.0206	0.0131 - 0.0325
12-17	0.0101	0.0227 - 0.0045	0.0276	0.0175 - 0.0434
18-23	0.0102	0.0226 - 0.0046	0.0233	0.0149 - 0.0365
24-29	0.0159	0.0352 - 0.0072	0.0341	0.0217 - 0.0535
30-35	0.0138	0.0304 - 0.0062	0.0296	0.0188 - 0.0464
36-41	0.0199	0.0442 - 0.009	0.0433	0.0275 - 0.0682
42-47	0.0288	0.0635 - 0.0131	0.0527	0.0334 - 0.0832
48-53	0.0280	0.0612 - 0.0128	0.0465	0.0295 - 0.0733
54-59	0.0290	0.0637 - 0.0132	0.0472	0.0298 - 0.0748

**Figure S1. Scatter graphs and linear fit for serotype-specific estimates of prevalence, clearance and acquisition.**



