Figure S1 : Community level sample size and age distribution. Created with
script: https://osf.io/7jxmn.

A Age–dependent mean response, by community
Lymphatic filariasis Wb123

Mean response, by community

B Age–dependent seroprevalence, by community
Lymphatic filariasis Wb123

Seroprevalence, by community

Lymphatic filariasis Bm14

Lymphatic filariasis Bm14

Lymphatic filariasis Bm33

Lymphatic filariasis Bm33

Taita Taveta
1 Kimorigo

Kwale
2 Makwenyeni
3 Mirihini
4 Mwadimu

Kilifi
5 Kinarani
6 Jaribuni
7 Masindeni

Tana River
8 Mikinduni
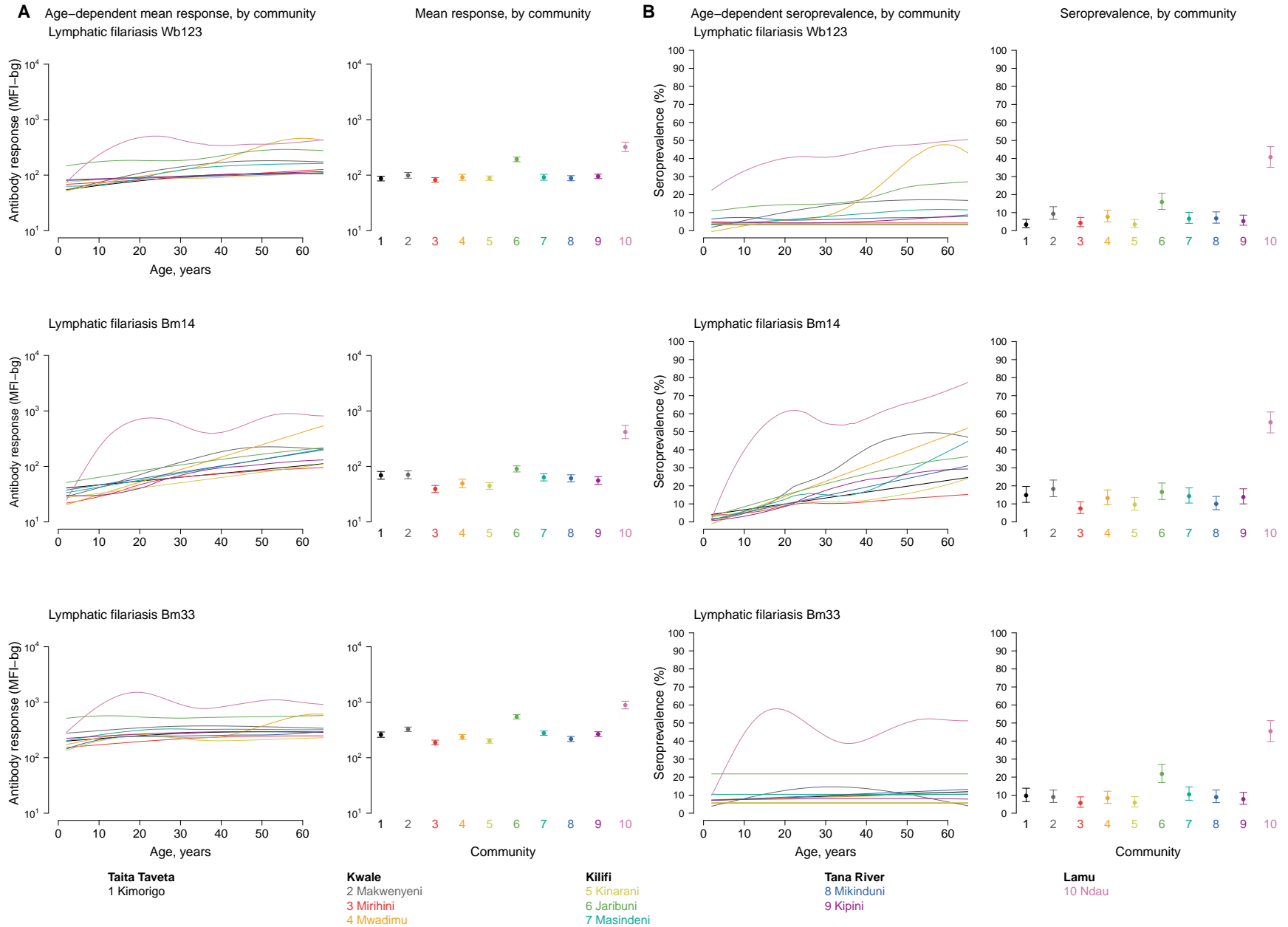9 Kipini

Lamu
10 Ndau

Figure S2 : Lymphatic filariasis antibody age-dependent mean response (**A**) and seroprevalence (**B**), stratified by community in Kenya's coastal region, 2015. Community-level mean antibody response and seroprevalence are age-adjusted and error bars represent 95% confidence intervals. Antibody response measured in median fluorescence units minus background (MFI-bg) on a BioRad Bio-Plex platform. Created with script: `https://osf.io/c79rw`.
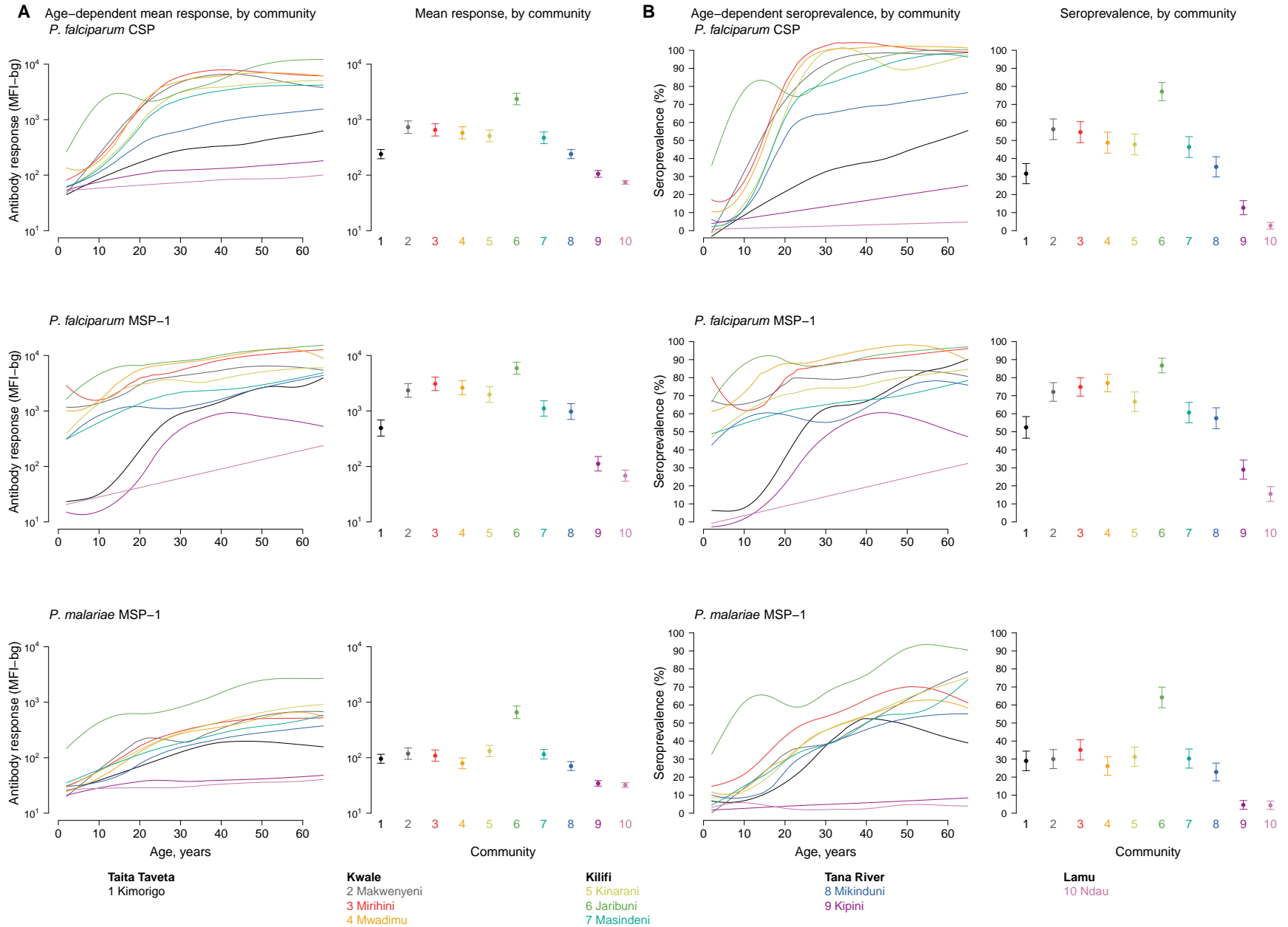
A Age-dependent mean response, by community
P. falciparum CSP

Mean response, by community

B Age-dependent seroprevalence, by community
P. falciparum CSP

Seroprevalence, by community

P. falciparum MSP−1

P. malariae MSP−1

Taita Taveta
1 Kimorigo

Kwale
2 Makwenyeni
3 Mirihini
4 Mwadimu

Kilifi
5 Kinarani
6 Jaribuni
7 Masindeni

Tana River
8 Mikinduni
9 Kipini

Lamu
10 Ndau

Figure S3 : Malarial antibody age-dependent mean response (**A**) and seroprevalence (**B**), stratified by community in Kenya's coastal region, 2015. Community-level mean antibody response and seroprevalence are age-adjusted and error bars represent 95% confidence intervals. Antibody response measured in median fluorescence units minus background (MFI-bg) on a BioRad Bio-Plex platform. Created with script: `https://osf.io/nhrc2`.
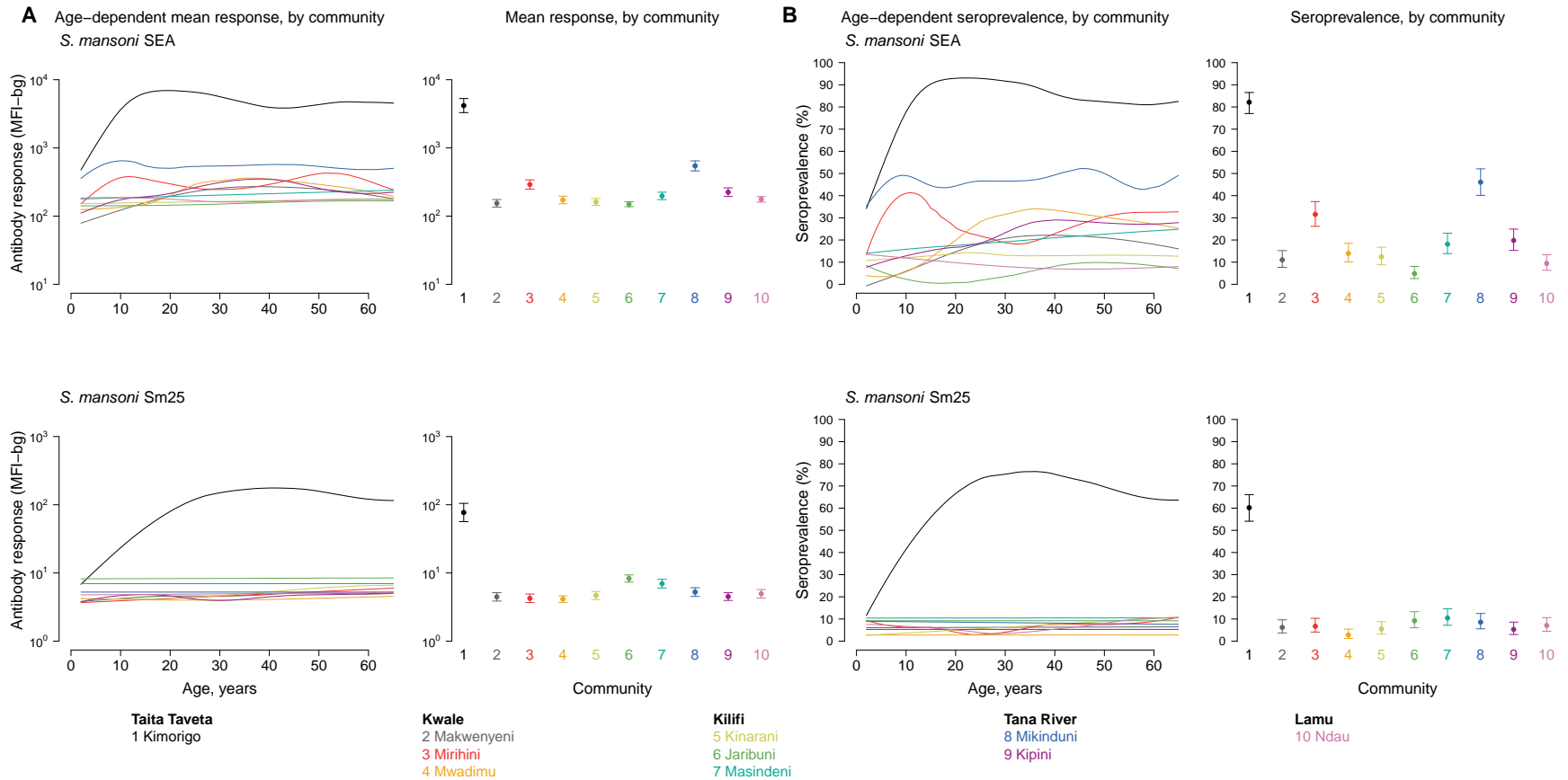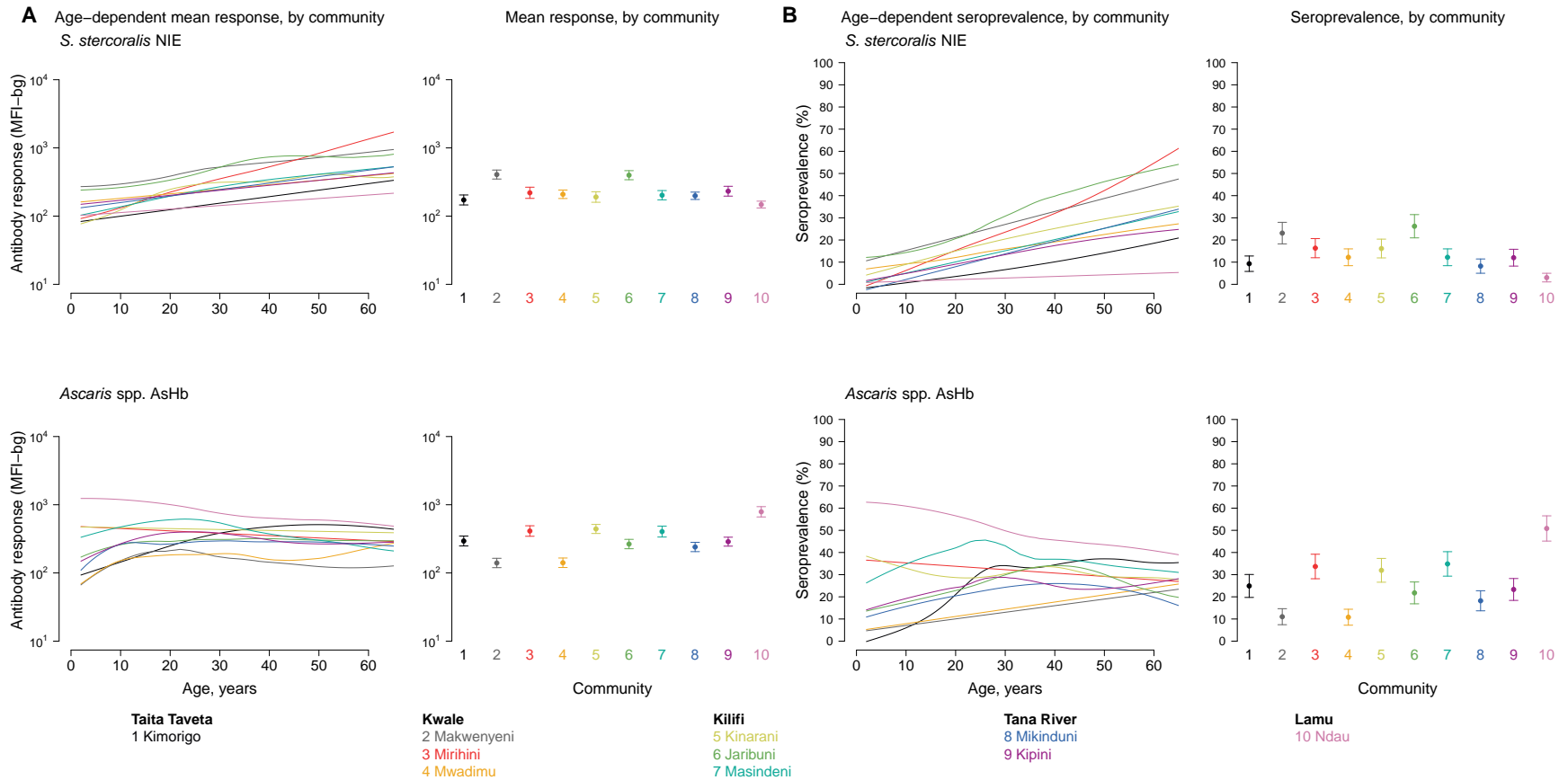
A Age–dependent mean response, by community
S. mansoni SEA

Mean response, by community

B Age–dependent seroprevalence, by community
S. mansoni SEA

Seroprevalence, by community

S. mansoni Sm25

S. mansoni Sm25

Taita Taveta
1 Kimorigo

Kwale
2 Makwenyeni
3 Mirihini
4 Mwadimu

Kilifi
5 Kinarani
6 Jaribuni
7 Masindeni

Tana River
8 Mikinduni
9 Kipini

Lamu
10 Ndau

Figure S4 : Schistosomiasis antibody age-dependent mean response (**A**) and seroprevalence (**B**), stratified by community in Kenya's coastal region, 2015. Community-level mean antibody response and seroprevalence are age-adjusted and error bars represent 95% confidence intervals. Antibody response measured in median fluorescence units minus background (MFI-bg) on a BioRad Bio-Plex platform. Created with script: `https://osf.io/z8v4n`.

Figure S5 : Age-dependent mean response (**A**) and seroprevalence (**B**) to *S. stercoralis* and *Ascaris* spp. antigens, stratified by community in Kenya's coastal region, 2015. Community-level mean antibody response and seroprevalence are age-adjusted and error bars represent 95% confidence intervals. Antibody response measured in median fluorescence intensity minus background (MFI-bg) units on a BioRad Bio-Plex platform. Created with script: `https://osf.io/spnvx`.
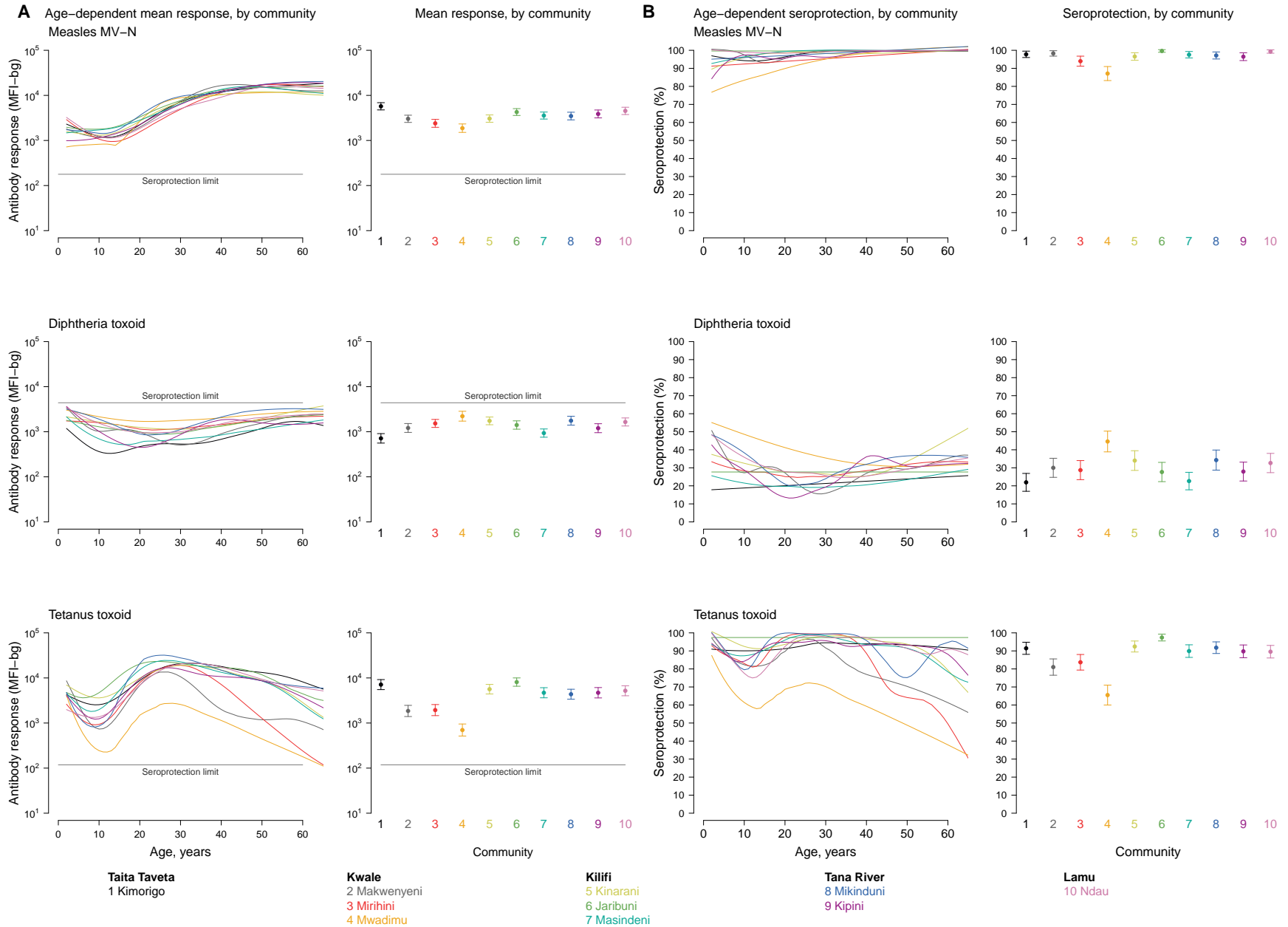
Figure S6 : Age-dependent mean response (**A**) and seroprotection (**B**) for measles, diphtheria, and tetanus stratified by community in Kenya's coastal region, 2015. Community-level mean antibody response and seroprotection are age-adjusted and error bars represent 95% confidence intervals. Antibody response measured in median fluorescence units minus background (MFI-bg) on a BioRad Bio-Plex platform. Created with script: `https://osf.io/uy5bf`.
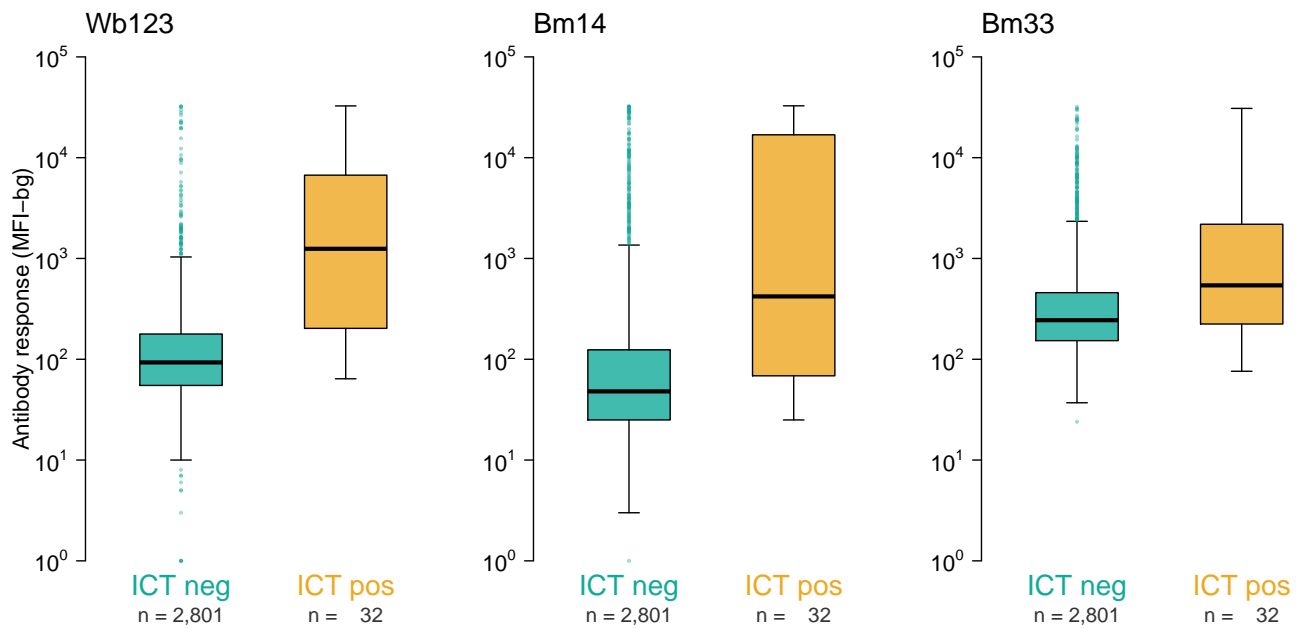
Figure S7 : Distribution of three lymphatic filariasis antibodies, stratified by rapid antigen immunochromatographic card test (ICT) results. Boxes mark the median and interquartile range of the distributions. Antibody response measured in median fluorescence units minus background (MFI-bg) on a BioRad Bio-Plex platform. Mann-Whitney U-test P<0.0001 for differences between ICT negative and positive individuals in antibody responses for each comparison (Wb123, Bm14, Bm33). Created with script: `https://osf.io/k9tms`.
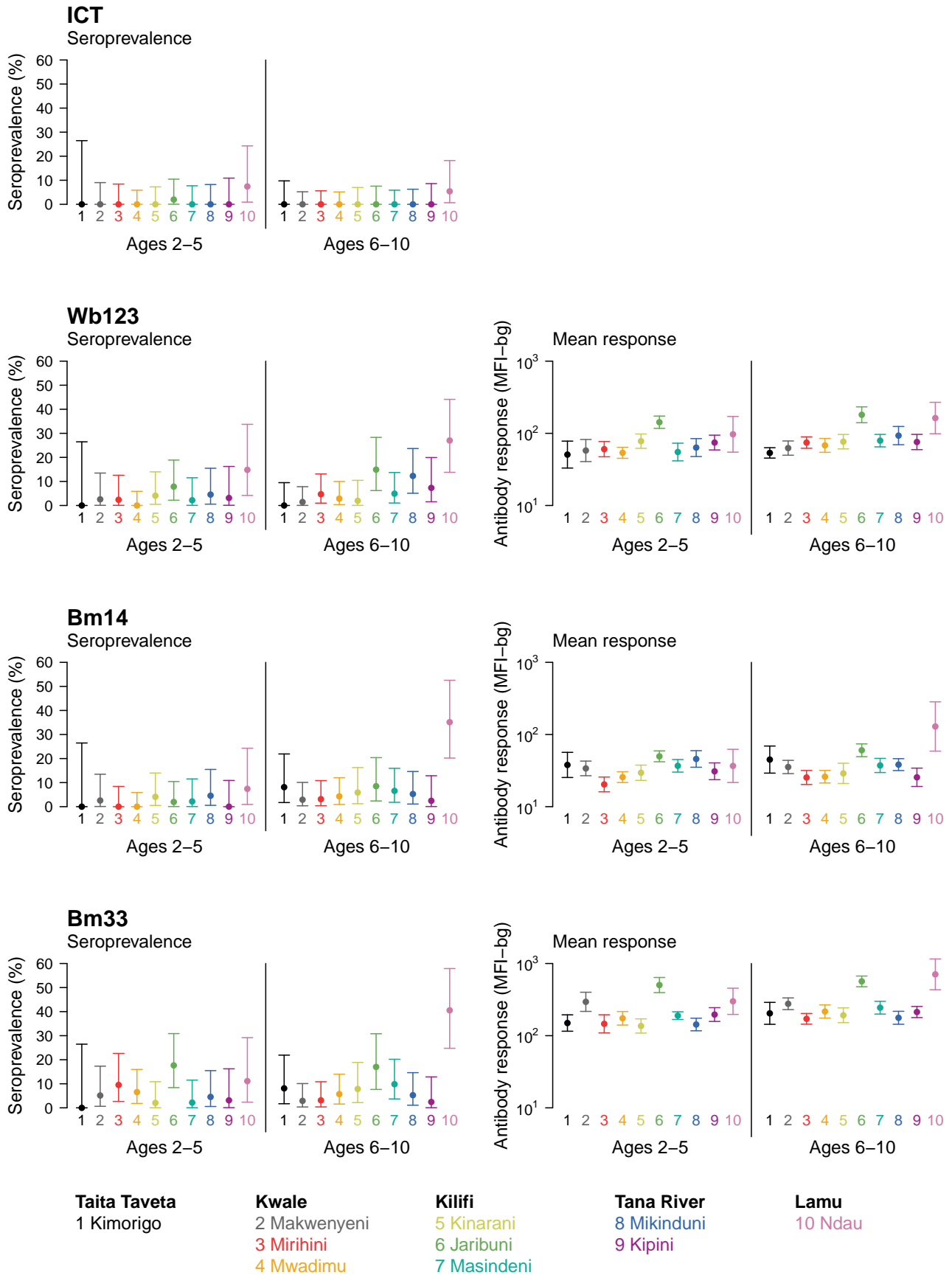
Figure S8 : Community level estimates of lymphatic filariasis seroprevalence and geometric mean antibody levels among children ages 2-5 and 6-10 years old. Child blood samples were tested the immunochromatographic card test (ICT) and three antigens (Wb123, Bm14, Bm33) measured in median fluorescence intensity minus background (MFI-bg) units on a multiplex BioRad Bio-Plex platform. The mean number of specimens tested per community within each age stratum was 47 (median=47; interquartile range=39, 58; range= 12, 70). Created with script: https://osf.io/xh9yt.