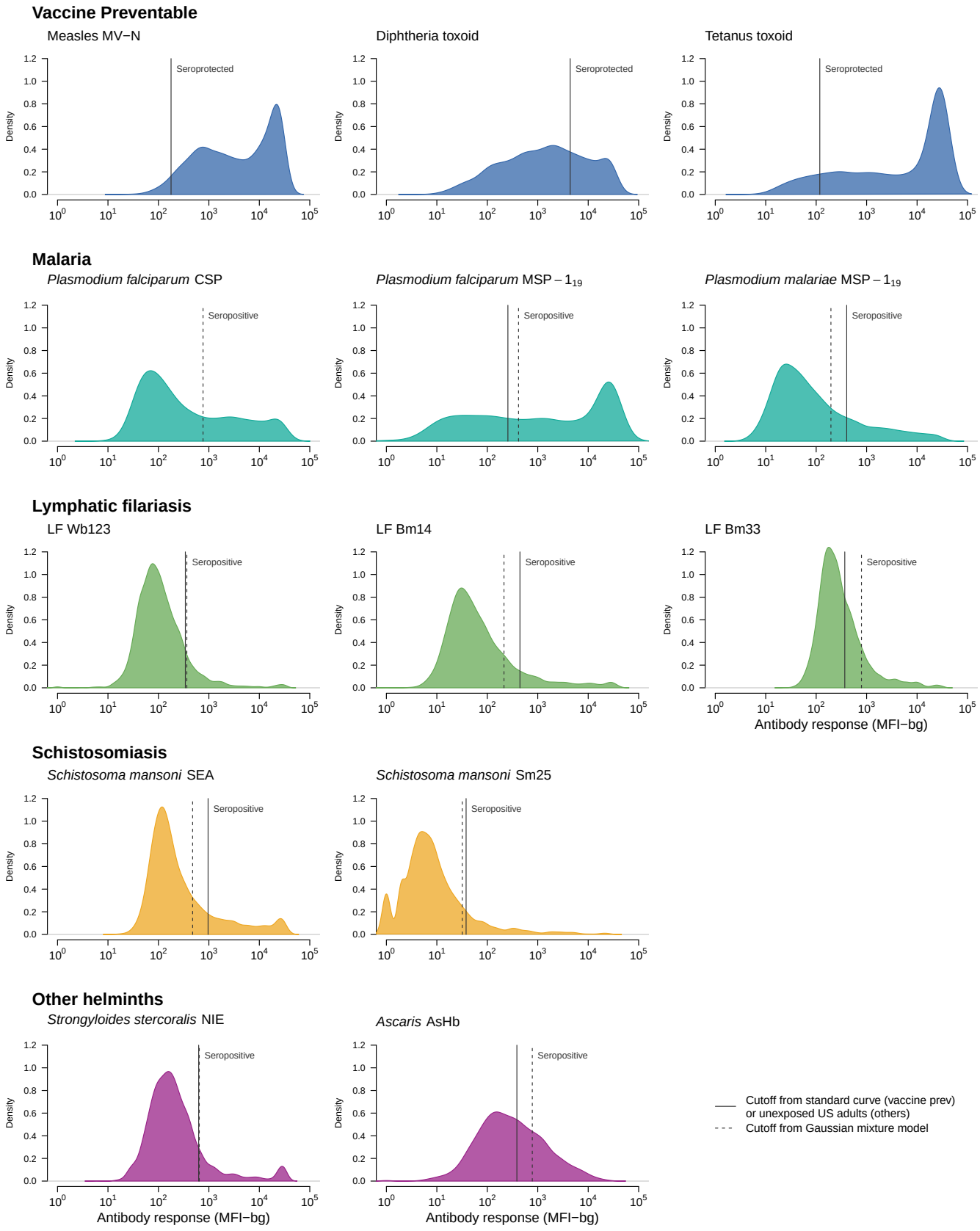

Fig. 1: Distribution of quantitative antibody levels measured in 10 communities in Kenya's coastal region, 2015. Antibody response measured in multiplex using median fluorescence units minus background (MFI-bg) on a BioRad Bio-Plex platform. Seroprotection cut points for measles, diphtheria, and tetanus estimated using a standard curve from WHO reference standards. Seropositive cut points for other antigens estimated using negative control serum samples (solid) and finite Gaussian mixture models (dashed). There was no negative control cut point determined for the *P. falciparum* CSP antigen. Table S1 includes cutoff values. The script that created this figure is here: `https://osf.io/d9jrc`.

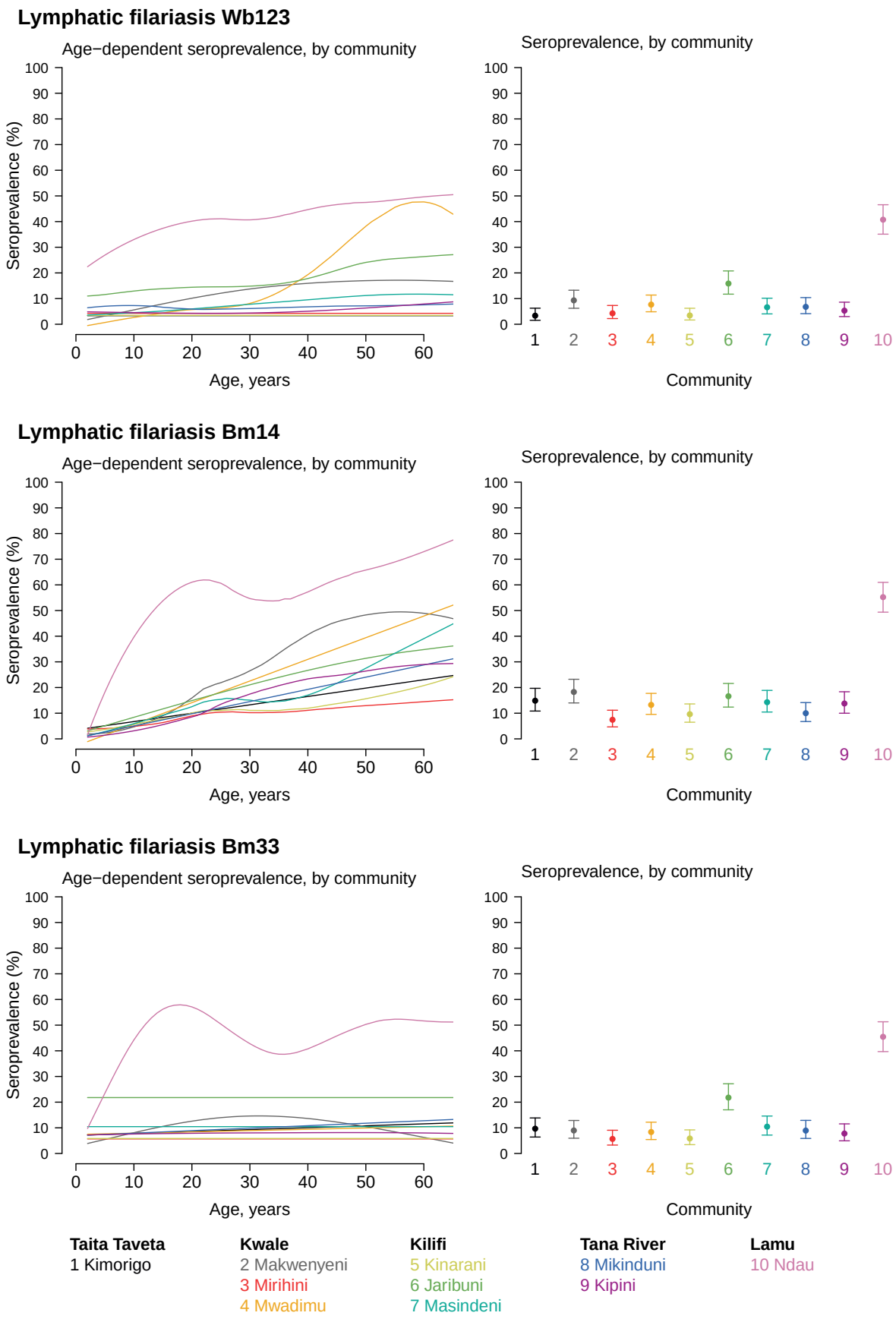

Fig. 2: Lymphatic filariasis antibody age-dependent seroprevalence and overall means, stratified by community in Kenya's coastal region, 2015. Community-level mean seroprevalence is age-adjusted and error bars represent 95% confidence intervals. Figure S2 is an extended version of this figure that also includes quantitative antibody levels. The script that created this figure is here: `https://osf.io/5zkxw`.

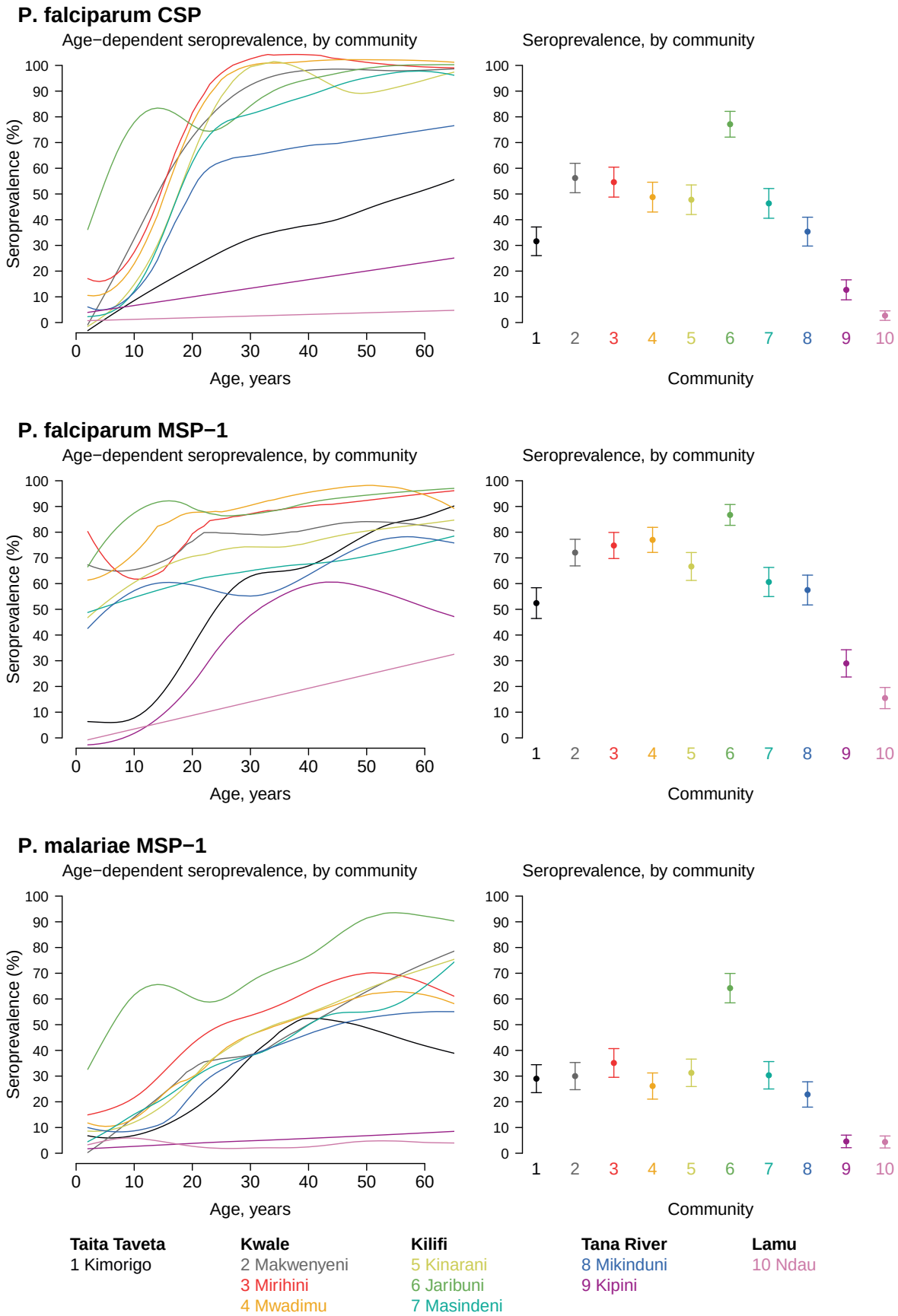

Fig. 3: Malarial antibody age-dependent seroprevalence and overall means, stratified by community in Kenya's coastal region, 2015. Community-level mean seroprevalence is age-adjusted and error bars represent 95% confidence intervals. Figure S3 is an extended version of this figure that also includes quantitative antibody levels. The script that created this figure is here: `https://osf.io/kzfd3`.

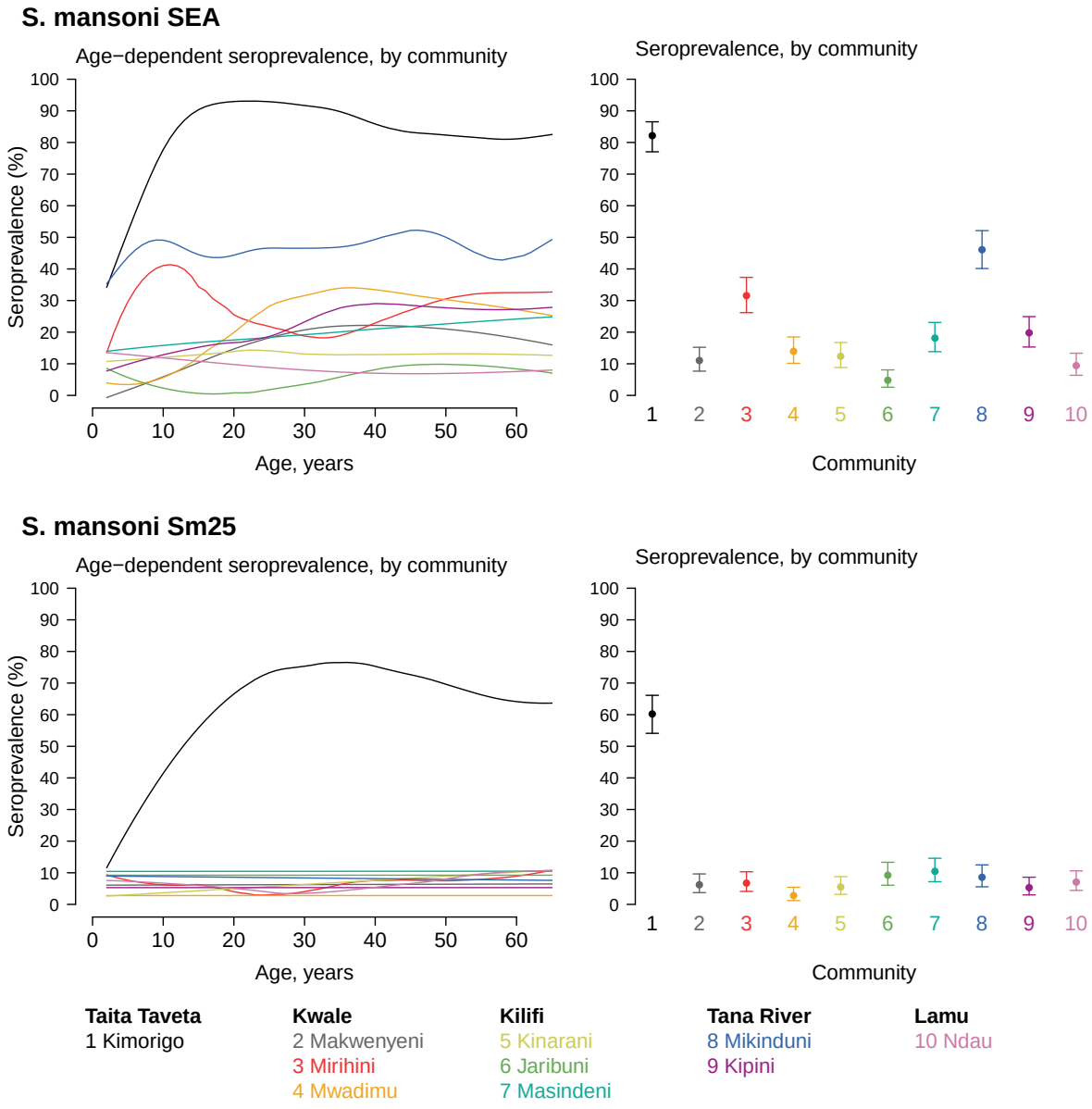

Fig. 4: Schistosomiasis antibody age-dependent seroprevalence and overall means, stratified by community in Kenya's coastal region, 2015. Community-level mean seroprevalence is age-adjusted and error bars represent 95% confidence intervals. Figure S4 is an extended version of this figure that also includes quantitative antibody levels. The script that created this figure is here: `https://osf.io/tpcg7`.

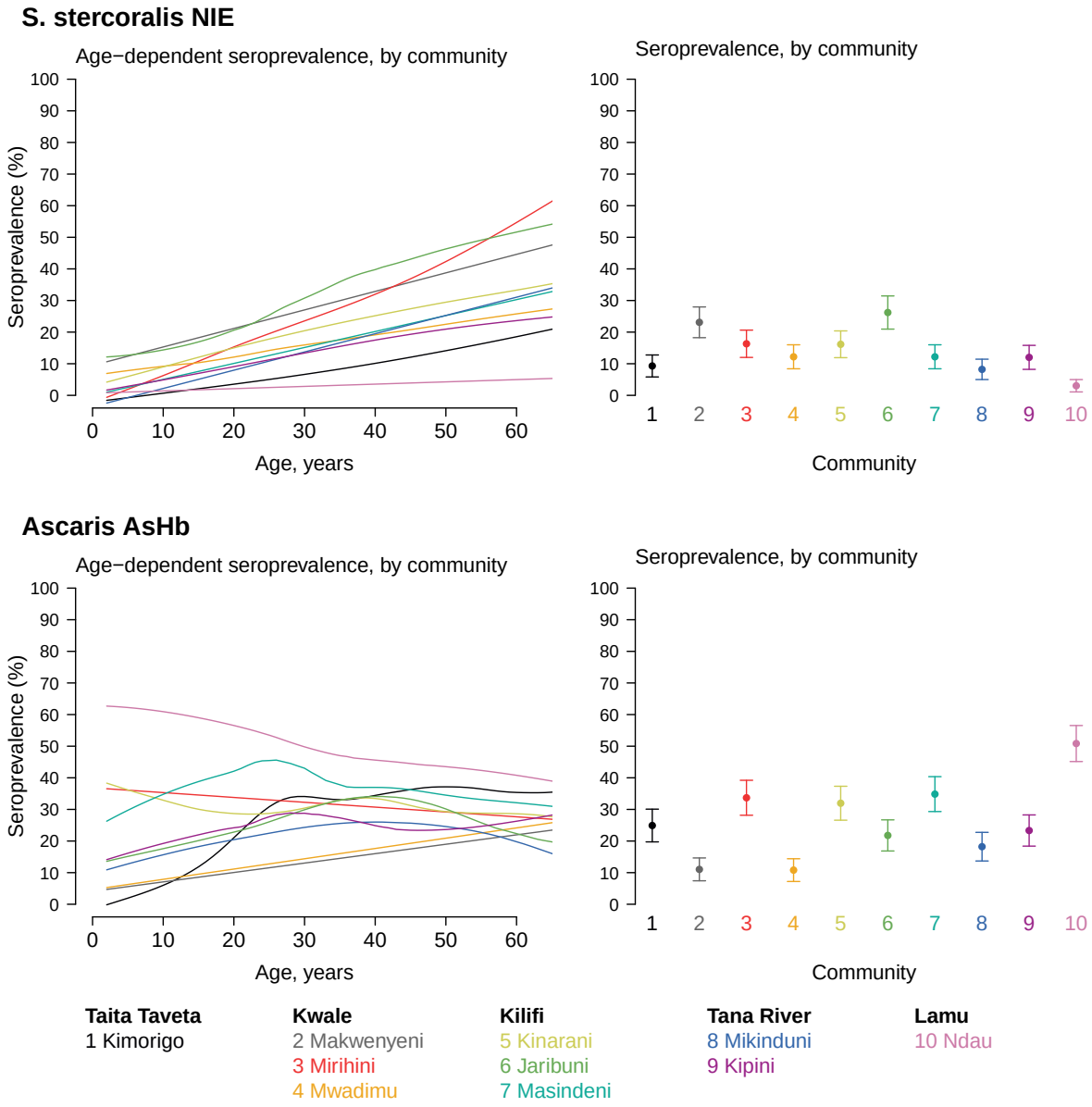

Fig. 5: Age-dependent seroprevalence and overall mean for antibodies to *S. stercoralis* and *A. lumbricoides*, stratified by community in Kenya's coastal region, 2015. Community-level mean seroprevalence is age-adjusted and error bars represent 95% confidence intervals. Figure S5 is an extended version of this figure that also includes quantitative antibody levels. The script that created this figure is here: `https://osf.io/j7ux3`.

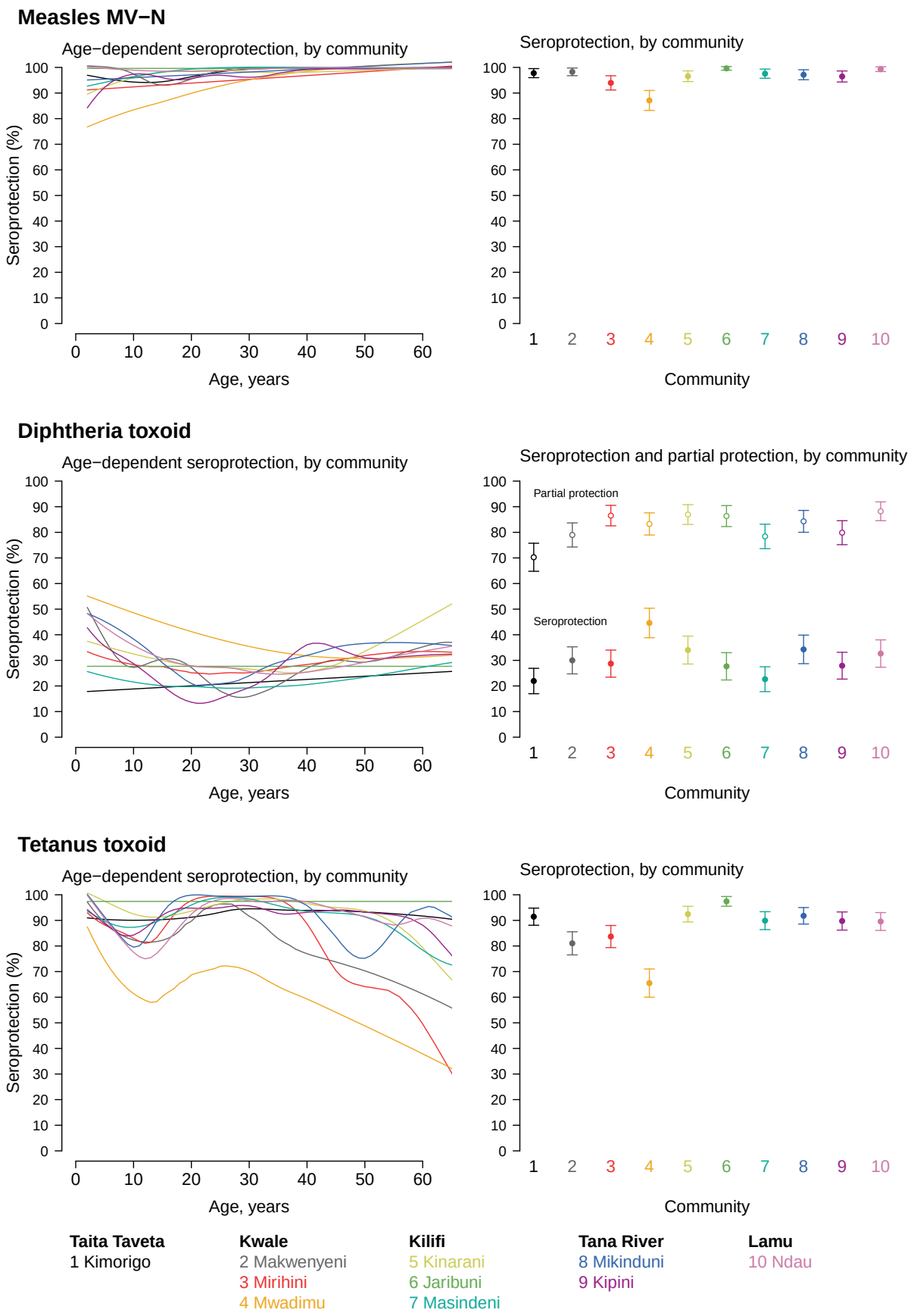

Fig. 6: Age-dependent seroprotection and overall seroprotection for measles, diphtheria, and tetanus stratified by community in Kenya's coastal region, 2015. Community-level seroprotection is age-adjusted and error bars represent 95% confidence intervals. For diphtheria, we included separate community level estimates of seroprotection (MFI > 4393 corresponding to 0.1 IU/ml) and partial protection (MFI > 183 corresponding to 0.01 IU/ml). Figure S6 is an extended version of this figure that also includes quantitative antibody levels. The script that created this figure is here: `https://osf.io/qrkhm`.

Supporting Information Figures

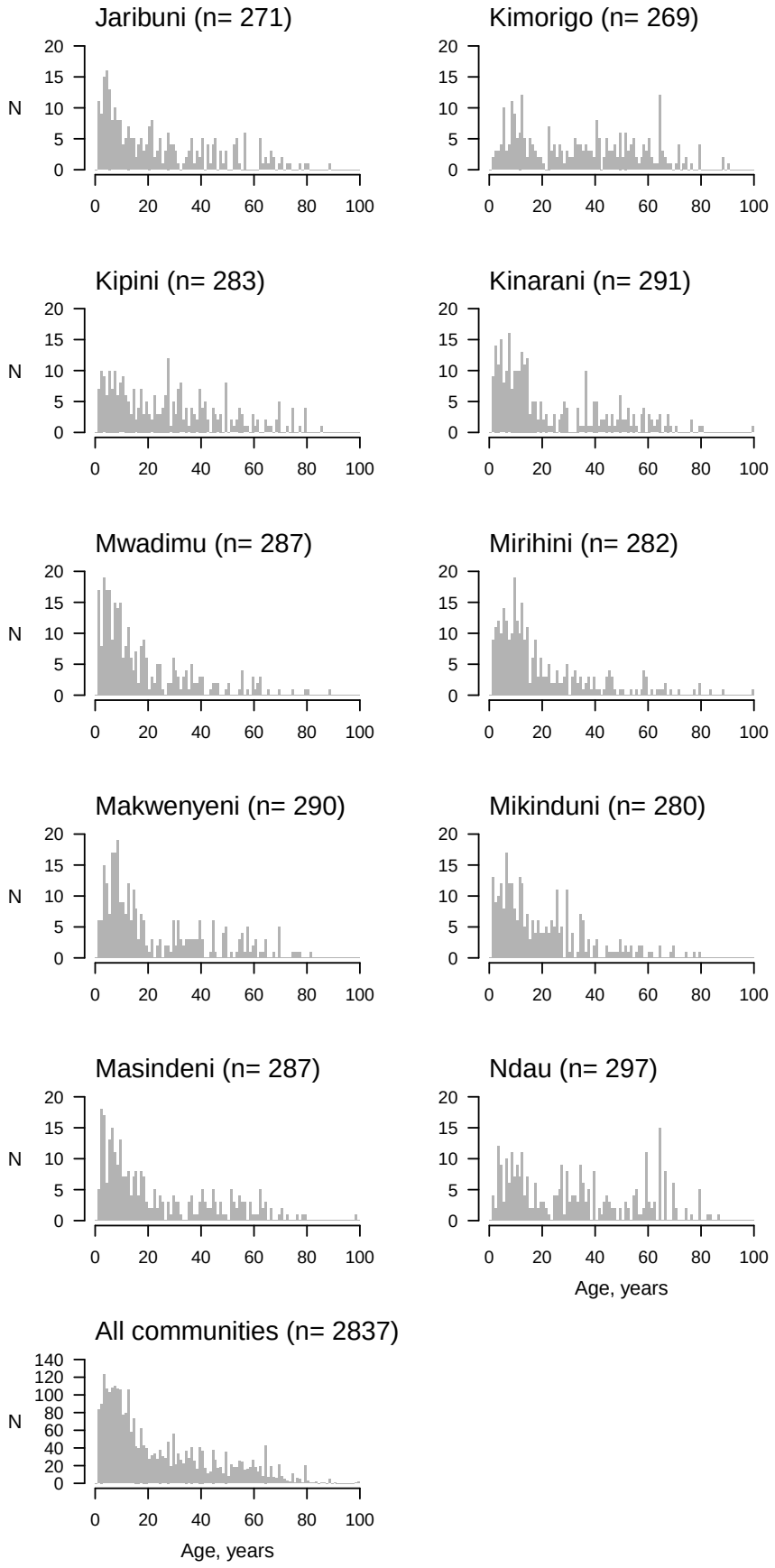

Fig. S1 : Community level sample size and age distribution. The script that created this figure is here: `https://osf.io/7jxmn`.

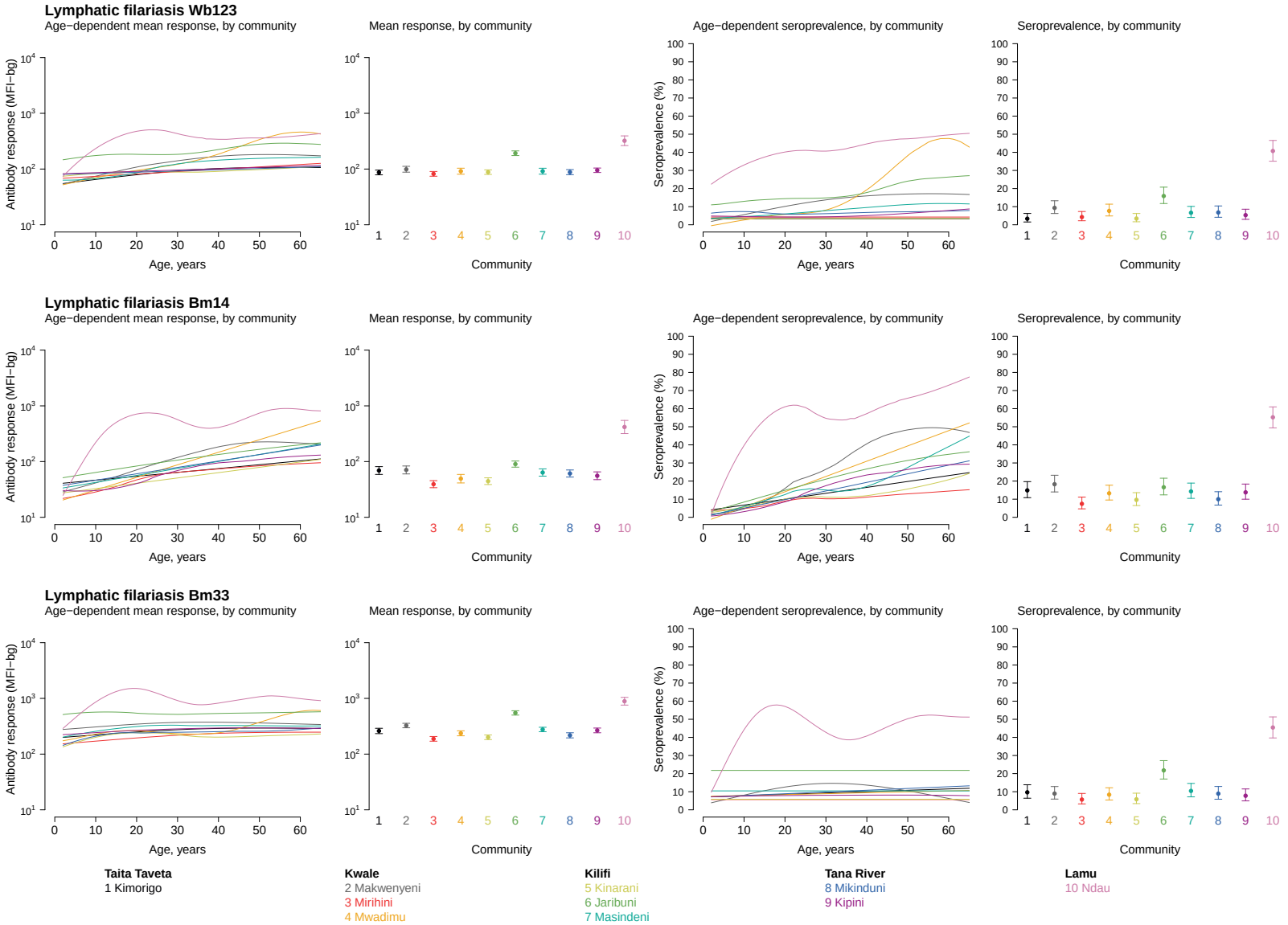

Fig. S2 : Lymphatic filariasis antibody age-dependent mean response and seroprevalence, stratified by community in Kenya's coastal region, 2015. Community-level mean antibody response and seroprevalence are age-adjusted and error bars represent 95% confidence intervals. Antibody response measured in median fluorescence units minus background (MFI-bg) on a BioRad Bio-Plex platform. The script that created this figure is here: `https://osf.io/c79rw`.

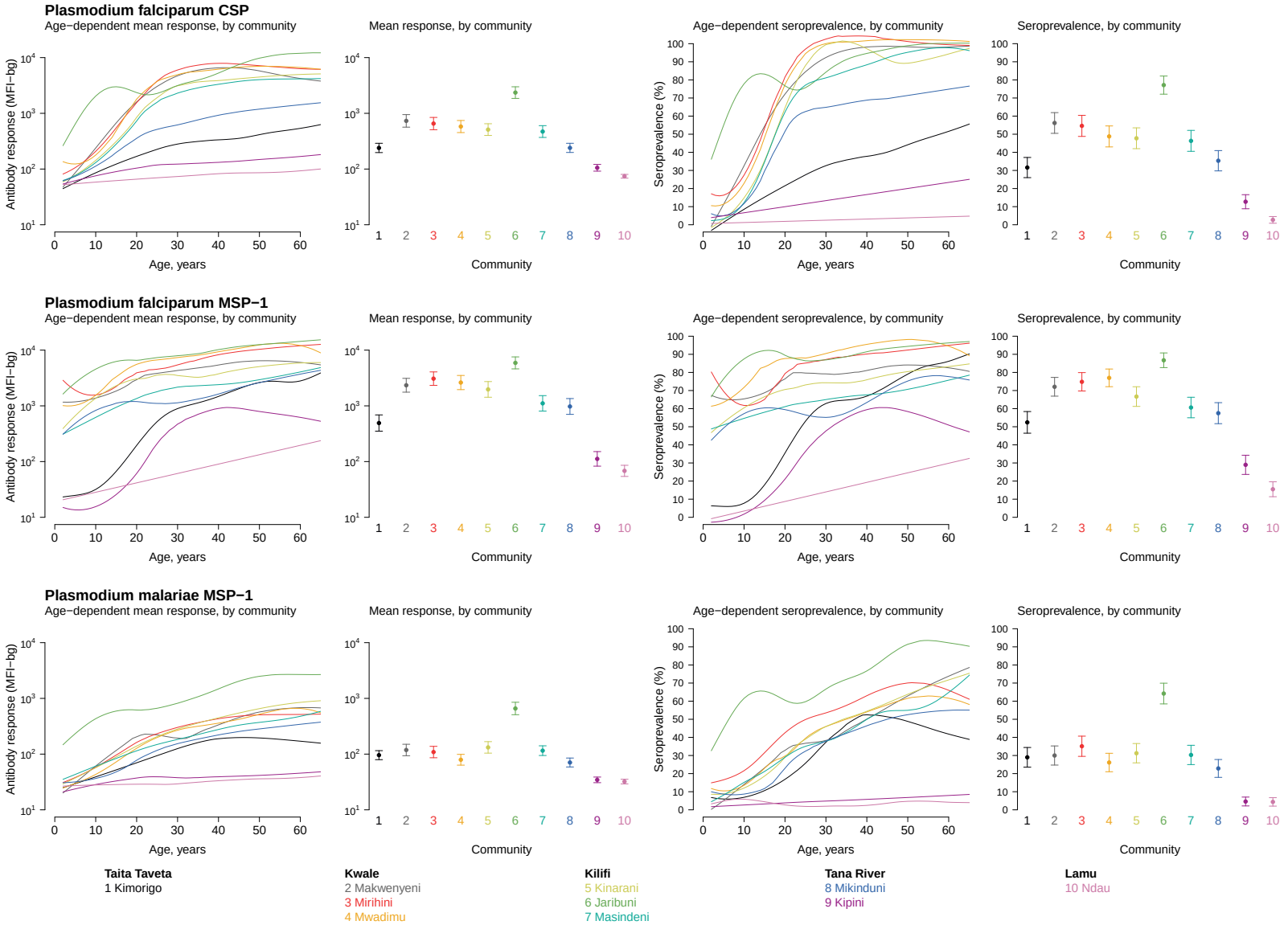

Fig. S3 : Malarial antibody age-dependent mean response and seroprevalence, stratified by community in Kenya's coastal region, 2015. Community-level mean antibody response and seroprevalence are age-adjusted and error bars represent 95% confidence intervals. Antibody response measured in median fluorescence units minus background (MFI-bg) on a BioRad Bio-Plex platform. The script that created this figure is here: `https://osf.io/nhrc2`.

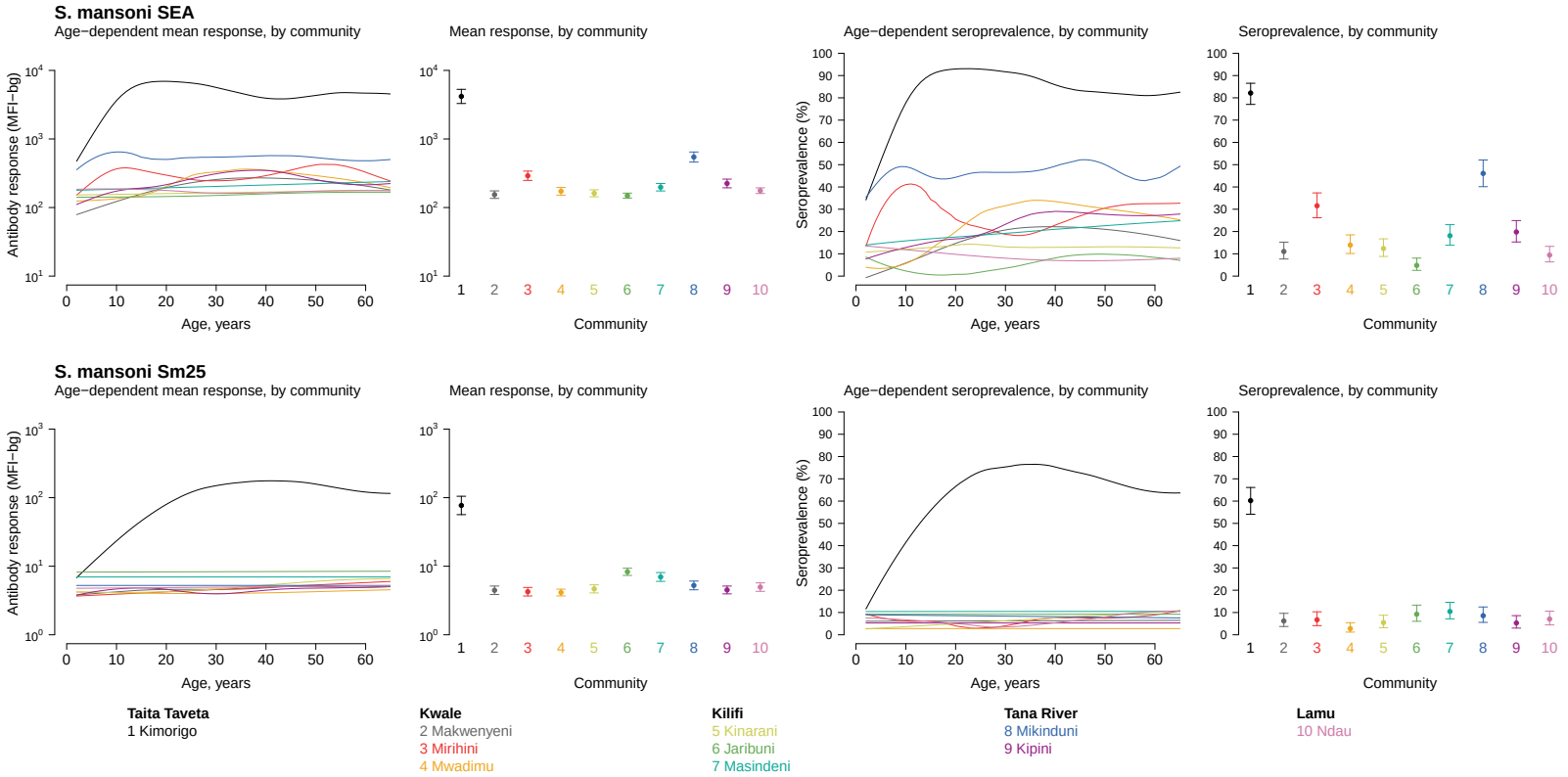

Fig. S4 : Schistosomiasis antibody age-dependent mean response and seroprevalence, stratified by community in Kenya's coastal region, 2015. Community-level mean antibody response and seroprevalence are age-adjusted and error bars represent 95% confidence intervals. Antibody response measured in median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

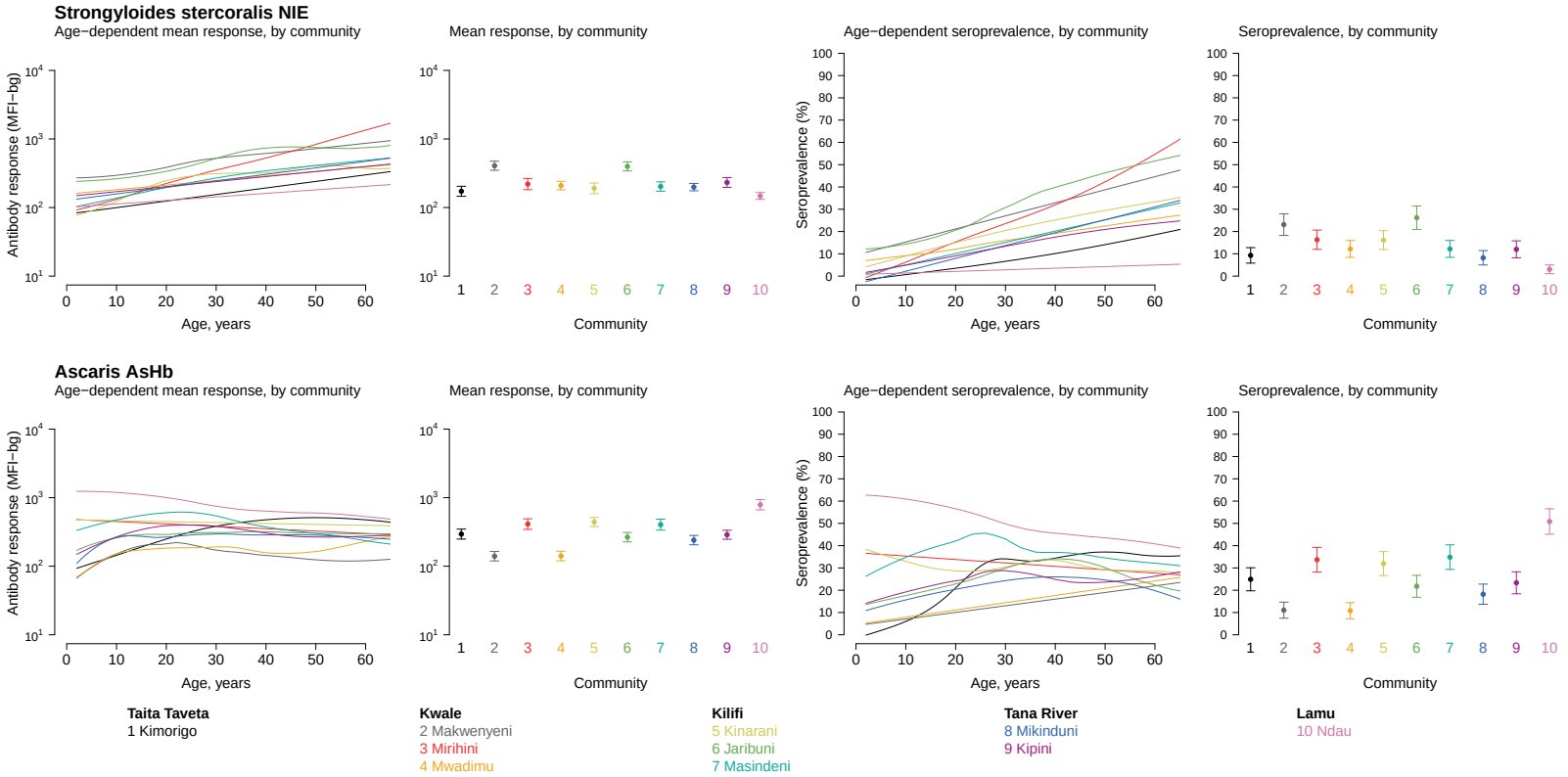

Fig. S5 : Age-dependent mean response and seroprevalence antibodies to *S. stercoralis* and *A. lumbricoides*, stratified by community in Kenya's coastal region, 2015. Community-level mean antibody response and seroprevalence are age-adjusted and error bars represent 95% confidence intervals. Antibody response measured in median fluorescence units minus background (MFI-bg) on a BioRad Bio-Plex platform. The script that created this figure is here: `https://osf.io/spnvx`.

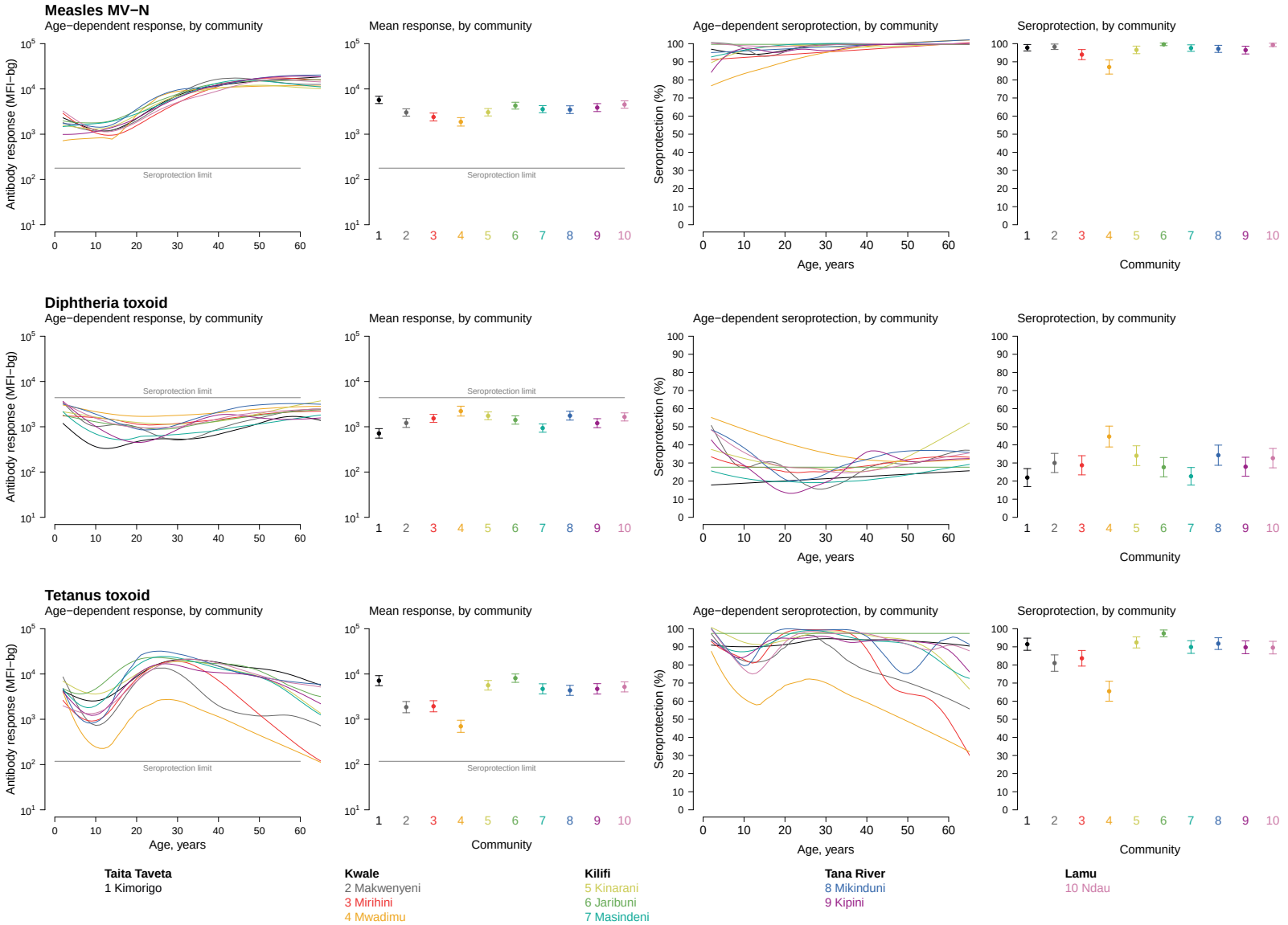

Fig. S6 : Age-dependent mean response and seroprotection for measles, diphtheria, and tetanus stratified by community in Kenya's coastal region, 2015. Community-level mean antibody response and seroprotection are age-adjusted and error bars represent 95% confidence intervals. Antibody response measured in median fluorescence units minus background (MFI-bg) on a BioRad Bio-Plex platform. The script that created this figure is here: `https://osf.io/uy5bf`.

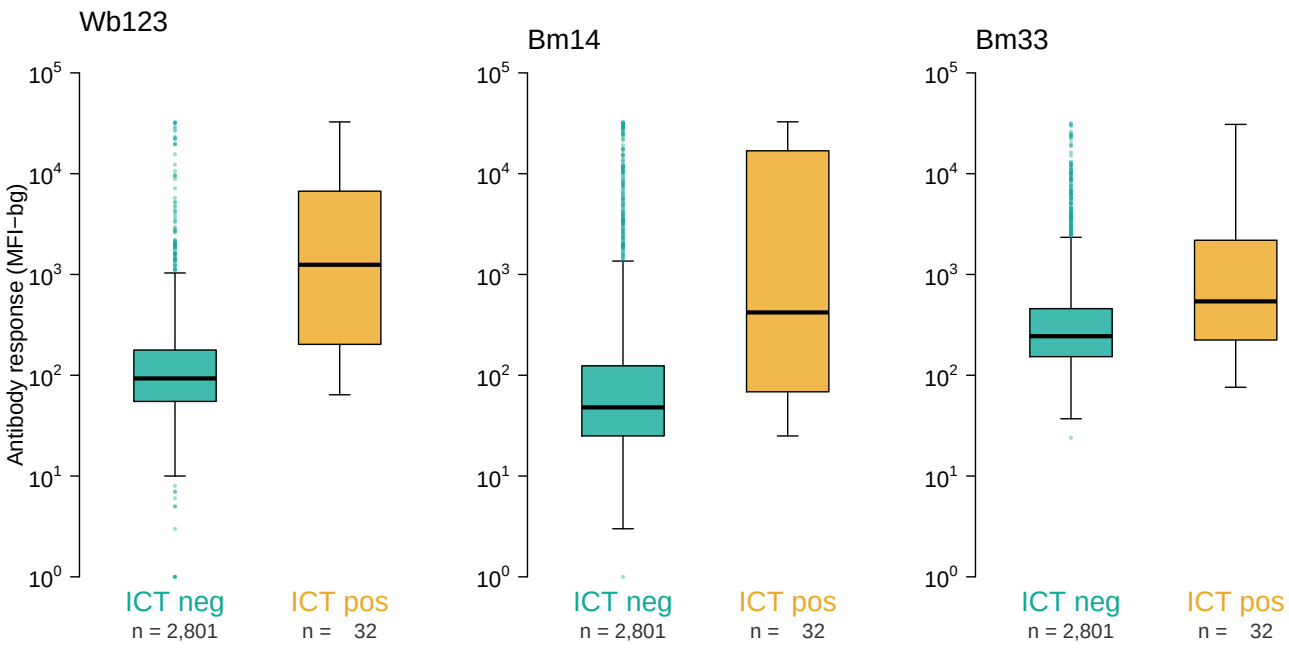

Fig. S7 : Distribution of three lymphatic filariasis antibodies, stratified by rapid antigen immunochromatographic card test (ICT) results. Boxes mark the median and interquartile range of the distributions. Antibody response measured in median fluorescence units minus background (MFI-bg) on a BioRad Bio-Plex platform. Mann-Whitney U-test $P < 0.0001$ for differences in antibody responses between ICT negative and positive individuals. The script that created this figure is here: `https://osf.io/k9tms`.

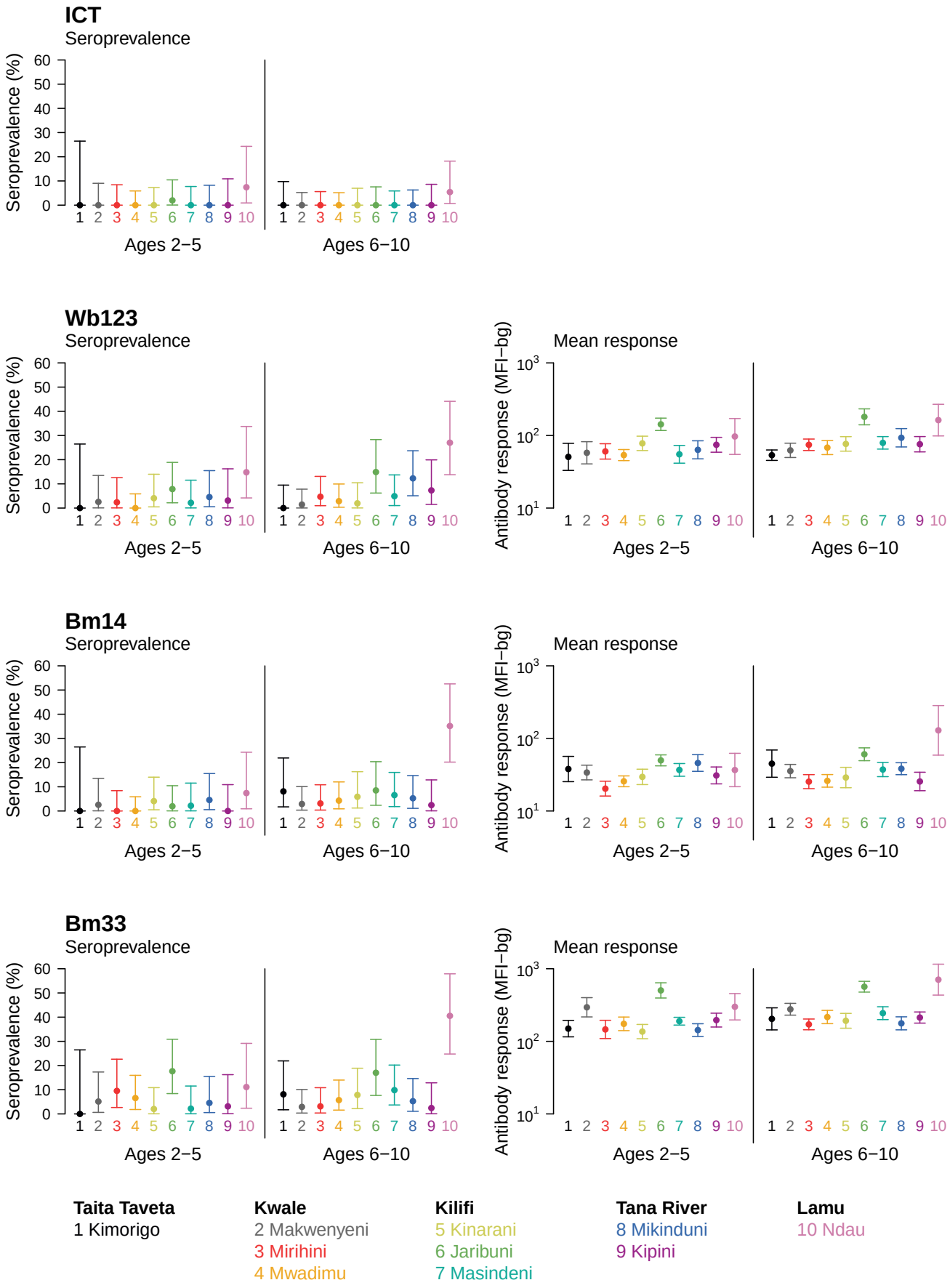

Fig. S8 : Community level estimates of lymphatic filariasis seroprevalence and geometric mean antibody levels among children ages 2-5 and 6-10 years old. Child blood samples were tested the immunochromatographic card test (ICT) and three antigens (Wb123, Bm14, Bm33) measured in median fluorescence units minus background (MFI-bg) 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). The script that created this figure is here: https://osf.io/xh9vt