



**S1 Fig. Sensitivity, specificity and seroprevalence point estimates and ranges for literature informed and vague uniform cattle model priors and posteriors.** Cattle data are from the combined BacZoo study conducted 2013 to 2015 in Arusha and Kilimanjaro Regions, and the SEEDZ study conducted in 2016 in Arusha and Manyara Regions of Tanzania. Point estimate refers to beta distribution mode for priors, and the median estimate for posteriors. Range refers to the beta distribution range for priors, and 95% Bayesian credibility interval for posteriors. RBT is Rose Bengal plate test. cELISA is the Animal and Plant Health Agency, UK, competitive enzyme-linked immunosorbent assay. Literature informed estimates were generated using a literature search of scientific publications from 1999-2019. Cattle estimates were calculated from studies based in Africa. Vague priors were specified as  $\text{dbeta}(1,1)$ .