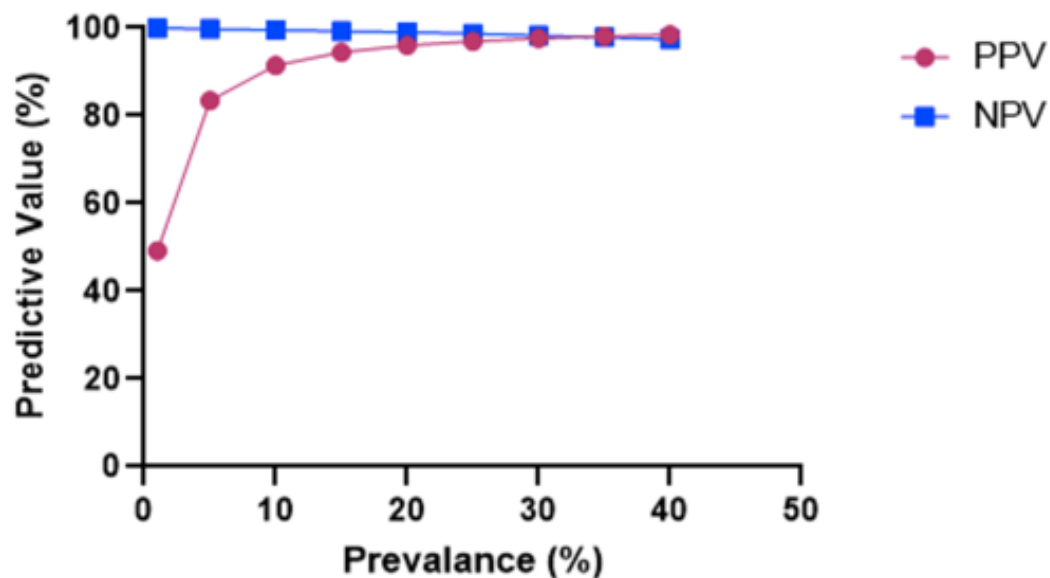**Figure 3. Impact of Prevalence on Test Predicative Values**

Footnote: This graph models the predictive value of a theoretic serologic test with 96% sensitivity and 99% specificity across a spectrum of prevalence. When the true prevalence of SARS-CoV-2 infection in a population is 1%, the positive predictive value of the test is only 49%. In other words, there is a 49% chance (close to a flip of the coin) that individuals with a positive screening test truly have the disease. As the prevalence increases, so does the predictive value. In contrast, when the prevalence of infection is 1%, the negative predictive value high (i.e., there is close to 100% probably the disease is truly absent when the result of the test is negative).

Abbreviations: positive predictive value (PPV); negative predictive value (NPV)