**Table S1. Diagnostic performance of microscopy, cRDT, and hsRDT among women in the first and second trimesters**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Test |  | qPCR | Sensitivity (95% CI) | Specificity (95% CI) | PPV (95% CI) | NPV (95% CI) | K |
| First trimester(N = 96) | Microscopy |  | (+) | (-) |  |  |  |  |  |
|  | (+) | 11 | 0 | 19.3 (10.1-31.9) | 100 (91.0-100) | 100 (71.5-100) | 45.9 (42.8-49.1) | 0.16 |
|  | (-) | 46 | 39 |  |  |  |  |  |
| cRDT | (+) | 24 | 0 | 42.1 (29.1-55.9) | 100 (91.0-100) | 100 (85.8-100) | 54.2 (48.6-59.6) | 0.37 |
|  | (-) | 33 | 39 |  |  |  |  |  |
| hsRDT | (+) | 23 | 0 | 40.4 (27.6-54.2) | 100 (91.0-100) | 100 (85.2-100) | 53.4 (48.1-58.7) | 0.36 |
|  | (-) | 34 | 39 |  |  |  |  |  |
| Second trimester(N = 191) | Microscopy | (+) | 44 | 1 | 38.6 (29.6-48.2) | 98.7 (93.0-100) | 97.8 (86.1-99.7) | 52.1 (48.4-55.7) | 0.33 |
|  | (-) | 70 | 76 |  |  |  |  |  |
| cRDT | (+) | 62 | 1 | 54.4 (44.8-63.7) | 98.7 (93.0-100) | 98.4 (89.8-99.8) | 59.4 (54.4-64.1) | 0.48 |
|  | (-) | 52 | 76 |  |  |  |  |  |
| hsRDT | (+) | 64 | 2 | 56.1 (46.5-65.4) | 97.4 (90.9-99.7) | 97.0 (89.0-99.2) | 60 (54.9-64.9) | 0.49 |
|  | (-) | 50 | 75 |  |  |  |  |  |

cRDT (conventional rapid diagnostic test); hsRDT (highly sensitive rapid diagnostic test); qPCR (quantitative polymerase chain reaction); (+) (positive); (-) negative); PPV (positive predictive value); NPV (negative predictive value).

**Table S2. Comparison of microscopy, cRDT, and hsRDT sensitivity stratified by parasite density as determined by qPCR**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Parasite density(p/µL) | qPCR(+) | Microscopy (+) | Microscopy sensitivity (95% CI) | cRDT (+) | cRDT sensitivity (95% CI) | hsRDT (+) | cRDT sensitivity (95% CI) |
| ˂ 100 | 118 | 7 | 5.93 (2.42-11.84)  | 34 | 28.81 (20.85-37.87) | 34 | 28.81 (20.85-37.87) |
| 100-200 | 8 | 5 | 62.50 (24.49-91.48) | 8 | 100 (63.06-100) | 8 | 100 (63.06-100) |
| ˃ 200 | 46 | 44 | 95.65 (85.16-99.47 | 45 | 97.83 (88.47-99.94) | 46 | 100 (92.29-100) |

cRDT (conventional rapid diagnostic test); hsRDT (highly sensitive rapid diagnostic test); qPCR (quantitative polymerase chain reaction); (+) (positive); (-) negative).