**S1 Table.** **Gene targets and primers used for current diagnosed of STIs in this study**

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| **Pathogen, target, primer and probe References** |
| ***Neisseria gonorrhoeae***  opa genes (opa) [35s]  [NG\_F](javascript:void(0)): TTGAAACACCGCCCGGAA  [NG\_R](javascript:void(0)): TTTCGGCTCCTTATTCGGTTTGA  NG\_P: [6FAM]CCGATATAATCCGCCCTTCAACATCAG[BHQ1]  ***Trichomonas vaginalis***  T. vaginalis‐specific repeat DNA fragment [36s]  TV\_F: AAAGATGGGTGTTTTAAGCTAGATAAGG  TV\_R: TCTGTGCCGTCTTCAAGTATGC  TV\_P: [6FAM]AGTTCATGTCCTCTCCAAGCGTAAGT[BHQ1]  ***Chlamydia trachomatis***  The cryptic plasmid [37s]  [CT\_F](javascript:void(0)): CATGAAAACTCGTTCCGAAATAGAA  [CT\_R](javascript:void(0)): TCAGAGCTTTACCTAACAACGCATA  CT\_P: [6FAM]TCGCATGCAAGATATCGA[MGBNFQ]  ***Mycoplasma genitalium***  MgPa adhesin gene [38s]  [MG\_F](javascript:void(0)): GAGAAATACCTTGATGGTCAGCAA  [MG\_R](javascript:void(0)): GTTAATATCATATAAAGCTCTACCGTTGTTATC  MG\_P: [6FAM]ACTTTGCAATCAGAAGGT[MGBNFQ] |

**References**

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