**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: TTGAAACACCGCCCGGAA NG\_R: 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: CATGAAAACTCGTTCCGAAATAGAA  CT\_R: TCAGAGCTTTACCTAACAACGCATA CT\_P: [6FAM]TCGCATGCAAGATATCGA[MGBNFQ]***Mycoplasma genitalium*** MgPa adhesin gene [38s] MG\_F: GAGAAATACCTTGATGGTCAGCAA MG\_R: GTTAATATCATATAAAGCTCTACCGTTGTTATC MG\_P: [6FAM]ACTTTGCAATCAGAAGGT[MGBNFQ] |

**References**

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