

Supplementary material belonging to
 "A novel sequencing-based vaginal health assay combining self-sampling, HPV
 detection and genotyping, STI detection, and vaginal microbiome analysis"

S1 Table. Assay targets and associated health conditions. List of all 31 bacterial targets and 19 HPV targets, their associations with different health conditions, and references.

| Target | Taxonomic rank | Association | Health condition | References |
|---------------------------------|----------------|-------------|--------------------------------|---|
| <i>Aerococcus</i> | genus | Associated | Bacterial Vaginosis | Ling et al., 2010; Ravel et al., 2011 |
| <i>Aerococcus christensenii</i> | species | Associated | Bacterial Vaginosis | Srinivasan et al., 2012 |
| <i>Atopobium</i> | genus | Associated | Bacterial Vaginosis | Biagi et al., 2009; Ravel et al., 2011 |
| <i>Atopobium vaginae</i> | species | Associated | Bacterial Vaginosis | Ling et al., 2010; Srinivasan et al., 2012; Datcu et al., 2013 |
| <i>Chlamydia trachomatis</i> | species | Associated | Sexually Transmitted Infection | Lane and Decker, 2016; Ziklo et al., 2016; Budrys et al., 2012 |
| | species | Associated | Cervicitis | Dehon and McGowin, 2014 |
| | species | Associated | Pelvic Inflammatory Disease | Brunham et al., 2015; Jossens et al., 1994; De Muylder et al., 1990 |
| | species | Associated | Idiopathic Infertility | De Muylder et al., 1990 |
| <i>Dialister micraerophilus</i> | species | Associated | Bacterial Vaginosis | Srinivasan et al., 2012; Xia et al., 2016 |
| <i>Fusobacterium</i> | genus | Associated | Bacterial Vaginosis | Ravel et al., 2011 |

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|--------------------------------|---------|----------------------|--------------------------------|---|
| <i>Fusobacterium nucleatum</i> | species | Inversely associated | Human papillomavirus Infection | Shannon et al., 2017 |
| <i>Gardnerella</i> | genus | Associated | Bacterial Vaginosis | Ravel et al., 2011 |
| | genus | Associated | Human papillomavirus Infection | Murta et al., 2000 |
| <i>Gardnerella vaginalis</i> | species | Associated | Bacterial Vaginosis | Ling et al., 2010; Srinivasan et al., 2012; Biagi et al., 2009; Delaney and Onderdonk, 2001 |
| | species | Associated | Aerobic Vaginitis | Donders et al., 2005 |
| | species | Associated | Human papillomavirus Infection | Gao et al., 2013 |
| <i>Gemella</i> | genus | Associated | Bacterial Vaginosis | Ravel et al., 2011; Xia et al., 2016 |
| <i>Lactobacillus</i> | genus | Inversely associated | Cervicitis | Anahtar et al., 2015 |
| | genus | Inversely associated | Bacterial Vaginosis | Ling et al., 2010; Srinivasan et al., 2012 |
| <i>Lactobacillus iners</i> | species | Inversely associated | Bacterial Vaginosis | Ling et al., 2010; Ravel et al., 2011; Srinivasan et al., 2012 |
| | species | Inversely associated | Human papillomavirus Infection | Lee et al., 2013 |
| <i>Lactobacillus jensenii</i> | species | Inversely associated | Bacterial Vaginosis | Ravel et al., 2011; Srinivasan et al., 2012; Fettweis et al., 2014 |
| <i>Megasphaera</i> | genus | Associated | Bacterial Vaginosis | Ling et al., 2010; Ravel et al., 2011; Srinivasan et al., 2012 |
| <i>Mobiluncus</i> | genus | Associated | Bacterial Vaginosis | Ravel et al., 2011 |
| <i>Mobiluncus curtisi</i> | species | Associated | Bacterial Vaginosis | Schwebke and Lawing, 2001; Meltzer et al., 2008 |

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|------------------------------|---------|------------|--------------------------------|--|
| <i>Mobiluncus mulieris</i> | species | Associated | Bacterial Vaginosis | Srinivasan et al., 2012; Datcu et al., 2013 |
| <i>Mycoplasma genitalium</i> | species | Associated | Sexually Transmitted Infection | Jensen, 2017 |
| | species | Associated | Cervicitis | Dehon and McGowin, 2014 |
| | species | Associated | Infertility | Grzeško et al., 2009 |
| <i>Neisseria gonorrhoeae</i> | species | Associated | Sexually Transmitted Infection | Hill et al., 2016 |
| | species | Associated | Pelvic Inflammatory Disease | Brunham et al., 2015; Jossens et al., 1994; De Muylder et al., 1990; Soper et al., 1994; Hebb et al., 2004; Brunham et al., 1988 |
| | species | Associated | Infertility | De Muylder et al., 1990 |
| <i>Papillibacter</i> | genus | Associated | Bacterial Vaginosis | Ling et al., 2010 |
| <i>Parvimonas</i> | genus | Associated | Bacterial Vaginosis | Ravel et al., 2011 |
| <i>Peptoniphilus</i> | genus | Associated | Bacterial Vaginosis | Ravel et al., 2011 |
| <i>Peptostreptococcus</i> | genus | Associated | Bacterial Vaginosis | Ravel et al., 2011; Delaney and Onderdonk, 2001 |
| <i>Porphyromonas</i> | genus | Associated | Bacterial Vaginosis | Ravel et al., 2011 |
| <i>Prevotella</i> | genus | Associated | Bacterial Vaginosis | Ling et al., 2010; Ravel et al., 2011; Srinivasan et al., 2012; Delaney and Onderdonk, 2001; Datcu et al., 2013 |
| <i>Prevotella amnii</i> | species | Associated | Bacterial Vaginosis | Srinivasan et al., 2012; Macklaim et al., 2013 |
| <i>Prevotella timonensis</i> | species | Associated | Bacterial Vaginosis | Srinivasan et al., 2012; Xia et al., 2016 |
| <i>Sneathia</i> | genus | Associated | Bacterial Vaginosis | Ravel et al., 2011; Srinivasan et al., 2012 |

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|--|---------|------------|-----------------------------------|---|
| | genus | Associated | Human papillomavirus Infection | Lee et al., 2013 |
| <i>Staphylococcus aureus</i> | species | Associated | Aerobic Vaginitis | Donders et al., 2002 ; Donders et al., 2005 ; Donders et al., 2017 |
| <i>Streptococcus agalactiae</i> | species | Associated | Aerobic Vaginitis | Donders et al., 2005 ; Donders et al., 2017 |
| HPV | - | Associated | Human papillomavirus Infection | Moscicki, 2005 ; Inan et al., 2017 ; Bauer et al., 1991 ; Doorbar et al., 2015 ; Baseman and Koutski, 2005 |
| lrHPV (types 6, 11, 42, 43, and 44) | - | Associated | Genital warts | X.-L. Wu et al., 2010 , Doorbar et al., 2017 |
| hrHPV (types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, and 68) | - | Associated | Cervical Cancer | Dartell et al., 2014 ; McDonald et al., 2014 ; Vidal et al., 2011 ; De Vuyst et al., 2012 ; Joshi et al., 2014 ; |
| | - | Associated | SIL (High & Low) | Dartell et al., 2014 ; Jarboe et al., 2004 ; Cappiello et al., 1997 ; Sellors et al., 2000 ; Evans et al., 2006 |
| | - | Associated | Cervicitis | Menon et al., 2016 |

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