**Table 5. Prospective associations between hormonal contraceptive use and herpes simplex virus type 2 (HSV-2) (N=4).**

| **Study** | **N, study sample** | **Length of follow-up; frequency STI assessment** | **STI diagnostic test** | **Length of follow-up; frequency STI assessment** | **Covariates** | **Reference group** | **OCP**a | **Injectable** | **Combined HC** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Borgdorff, 2015 [37] | 163, HIV-negative sex workers in Kigali, Rwanda ages 18 to 49, *N=21 HSV-2 incident casesc* | 24M; 0M, 3M, 6M, 12M, 24M | HerpeSelect 2 ELISA (index ≥3.5 defined as positive) | 24M; 0M, 3M, 6M, 12M, 24M | Age, education, years worked as sex worker, breast-feeding, consistent condom use, antibiotic use past 14 d, ever used antibiotics, time duration between assessments | Non-pregnant non-hormonal user | OCP aOR: 4.28 (0.07, 262.1) | Injectable (type not specifiedd) aOR: 6.34 (0.25, 158.5) | NA |
| Chohan, 2009 [53] | 297, HIV-negative sex workers in Mombasa, Kenya ages 18 to 46, N=*115 HSV-2 incident cases (23 cases per 100 PY)b* | 13Y; every 1M (median time b/w visits: 33d [IQR 28-48] | HSV-2- type-specific HSV-2 gG based ELISA (index value of >1.1 defined as positive) | 13Y; every 1M (median time b/w visits: 33d [IQR 28-48] | Education, parity, alcohol and tobacco use, vaginal washing practices, bar vs. night club work. Time-dependent variables: age, duration of sex work, presence of other genital tract infections, # sex partners per week, condom use during past working weekFinal model: duration of sex work, bar (vs. night club) work, # sex partners per week, percentage condom use past week, presence of BV  | Non-hormonal user  | OCP aHR: 0.50 (0.23, 1.08)# | NA | aHR Norplant/ DMPA (combined): 0.92 (0.53, 1.61) |
| Grabowski, 2015 [35] | 682, HIV-negative women in Rakai, Uganda ages 15 to 49 who had a HIV-negative male partner, N=*52 HSV-2 incident cases*e | 3Y; 0M, 12M & 24M | HSV-2 ELISA test | 3Y; 0M, 12M & 24M | Age, education of woman and male partner, # of lifetime sexual partners. Time-varying variables: male circumcision, coital frequency, and female and male self-report of any condom use and non-marital partners in the past year. Final model: did not include coital frequency or male circumcision based on model fit | Non-pregnant non-hormonal user  | OCP aHR: 0.49 (0.08, 3.01) | Consistent DMPA users aHR: 2.26 (1.09, 4.69)\*; Initiated DMPA aHR: 0.75 (0.29, 1.92); Discontinued DMPA use aHR: 0.58 (0.13,2.51) | NA |
| Socias, 2017 [54] | 149, HIV-positive (N=13) and HIV-negative (N=136) sex workers in Vancouver, Canada ages 14+, *N=39 HSV-2 incident cases;* 17.1 cases per 100 PY (12.4, 23.6) | 4Y; every 4M | Serum samples via non-specific EIA HSV IgG. If reactive, anti-HSV-2 using TSS Focus HerpeSelect-2 IgG EIA (Focus Diagnostics) | 4Y; every 4M | Time invariant: Age, indigenous ancestry, education. Time-varying: HIV status, incident STIs (*T. pallidum*, NG and CT), average # of clients per week, # male non-commercial partners, inconsistent use of condoms by clients and non-clients, respectively, type of sex work venueFinal model (stepwise selection): type of sex work venue | Non-DMPA user in prior 6M | NA | HIV positive and negative DMPA users aHR: 4.43 (1.90, 10.35)\*; HIV negative DMPA users aHR: 3.97 (1.64, 9.60)\* | NA |

Notes:PY: person-years at risk.\* Statistically significant at p<0.05. # Marginally significant at p=0.08;

a OCP type was unspecified unless COC (combined oral contraception) or POP (progestin-only pill) is noted.

b *10 women seroconverted to HSV-2 & HIV-1 at same visit; PY: person-years; NA: not assessed by study.*

*c* Women censored after first incident infection.

d Injectable type not reported but authors note most commonly DMPA in setting with occasional norethisterone enanthate use.

e Excluding incident cases among pregnant women.