

Supplementary materials

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Table S1. Linear regression of association between *Neisseria subflava* MICs for azithromycin and ceftriaxone (log values) and consumption of macrolides and betalactams, respectively, limited to the two groups of MSM

	Coef. (95% CI)	P-value
Azithromycin/macrolides	-0.10 (-1.23- 1.03)	0.856
Ceftriaxone/betalactams	-0.30 (-1.36- 0.77)	0.572

Table S2. Linear regression of association between *Neisseria subflava* MICs for azithromycin and ceftriaxone (log values) and consumption of macrolides and betalactams, respectively, controlling for number of days since relevant antimicrobial was consumed.

	Coef. (95% CI)	P-value
Azithromycin/macrolides	3.37 (-4.83- 11.57)	0.414
Ceftriaxone/betalactams	-0.89 (-4.19- 2.41)	0.590

Table S3. Zero inflated negative binomial regression of association between the abundance of macrolide, betalactam, fluoroquinolone and tetracycline resistance associated genes and the consumption of these classes of antimicrobials, limited to the two groups of MSM

Antimicrobial consumption/gene abundance	Coef. (95% CI)	P-value
Azithromycin/macrolides	0.09 (-0.45- 0.63)	0.740
Ceftriaxone/betalactams	0.19 (-0.69- 1.07)	0.676
Fluoroquinolone/fluoroquinolone	0.14 (-1.12 -1.40)	0.827
Tetracycline/tetracycline	0.42 (-0.24- 1.08)	0.215

Table S4. Zero inflated negative binomial regression of association between the abundance of macrolide, betalactam, fluoroquinolone and tetracycline resistance associated genes and the consumption of these classes of antimicrobials, controlling for number of days since relevant antimicrobial was consumed.

Antimicrobial consumption/gene abundance	Coef. (95% CI)	P-value
Azithromycin/macrolides	2.30 (-1.23- 5.83)	0.202
Ceftriaxone/betalactams	2.07 (-0.84- 4.99)	0.163
Fluoroquinolone/fluoroquinolone	-2.65 (-6.03 -0.74)	0.126
Tetracycline/tetracycline	-3.21 (-11.4- 4.95)	0.440