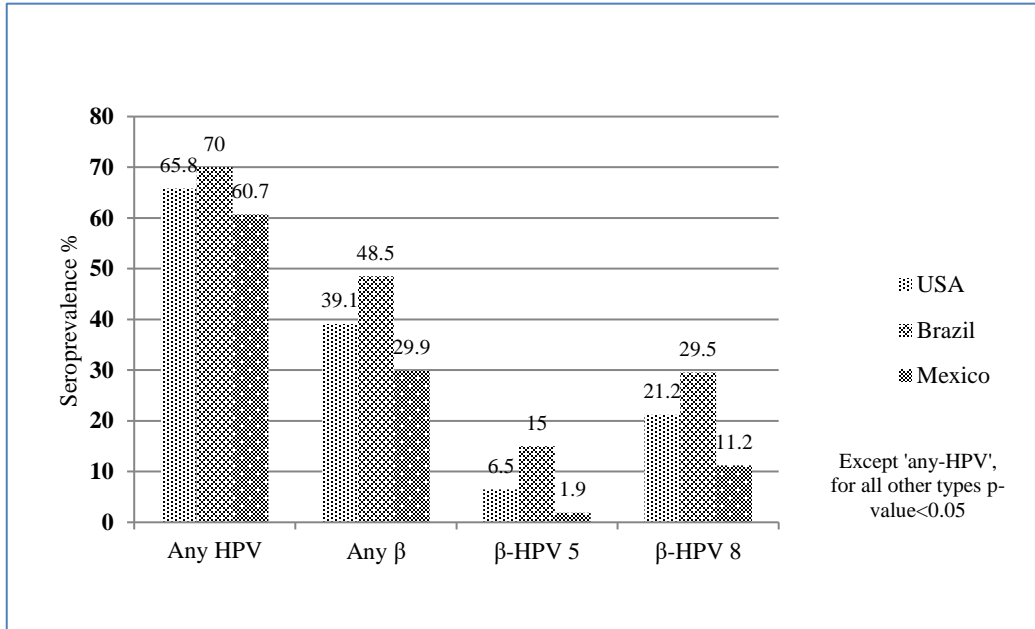
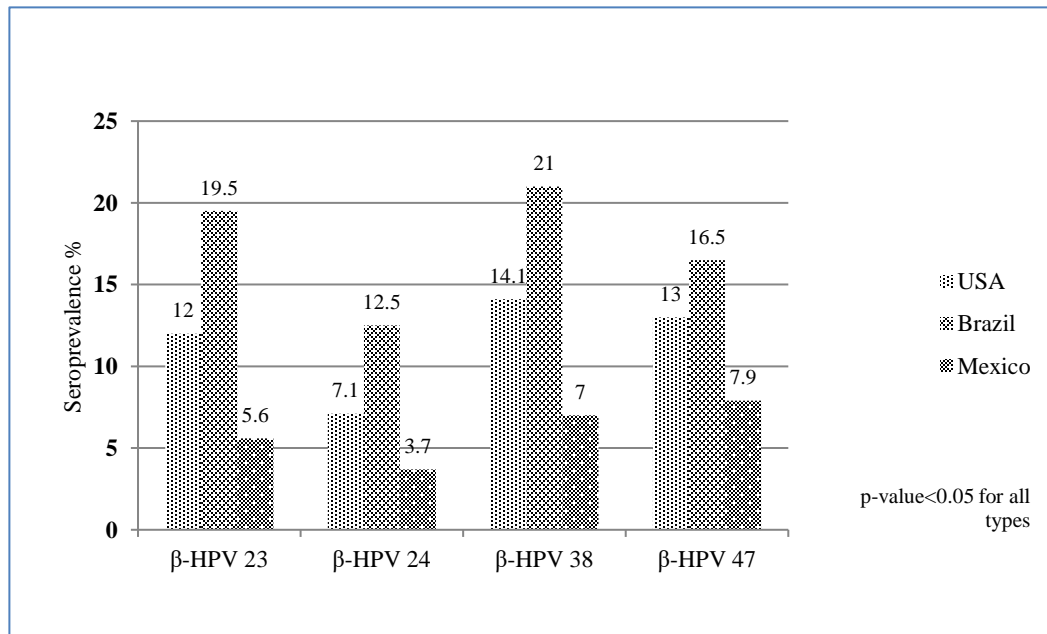


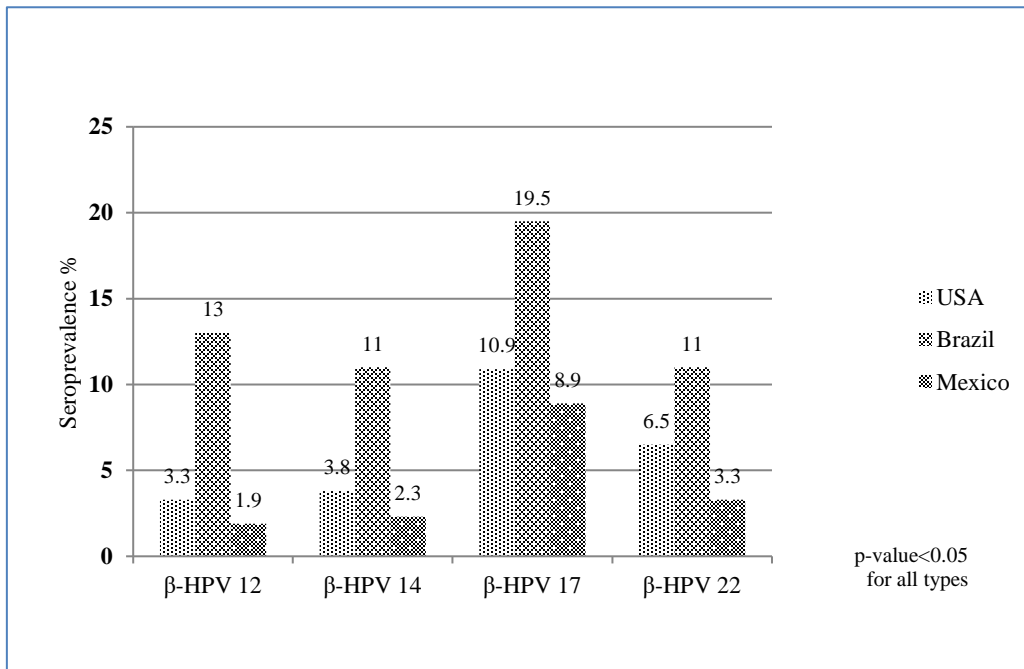
Supplemental Figures and Tables



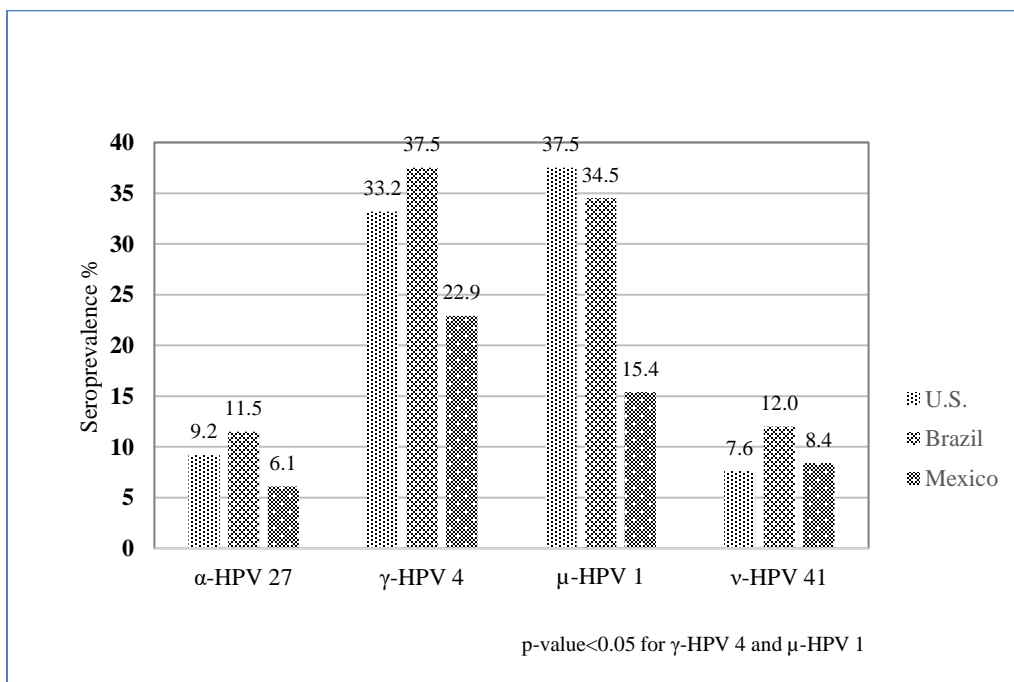
Supplement Fig. 1(a). Seroprevalence of type-specific cutaneous HPV at baseline of men residing in U.S., Brazil and Mexico



Supplement Fig. 1(b). Seroprevalence of type-specific cutaneous HPV at baseline of men residing in U.S., Brazil and Mexico



Supplement Fig. 1(c). Seroprevalence of type-specific cutaneous HPV at baseline of men residing in U.S., Brazil and Mexico



Supplement Fig. 1(d). Seroprevalence of type-specific cutaneous HPV at baseline of men residing in U.S., Brazil and Mexico

Supplemental Fig. 1(a), (b), (c), (d) present seroprevalence of cutaneous HPV by country. Any-HPV variable was created, if a persons tested positive for ≥ 1 of the 14 cutaneous HPV types included in this study, he was considered seropositive for any-HPV. Any- β variable was created, if a person tested positive for ≥ 1 of the 10 beta HPV types included in this study, he was considered seropositive for any- β HPV. 1A shows seroprevalence of any-HPV, any- β , and beta types 5 and 8. 1B shows seroprevalence of beta types 23, 24, 38 and 47. 1C shows seroprevalence of beta types 12, 14, 17 and 22. 1D shows seroprevalence of alpha type 27, gamma type 4, mu type 1 and nu type 41. Chi-square P-value represents differences by country.

Supplement Table 1. Factors independently associated with α , β , ν cutaneous HPV seropositivity among men residing in the U.S., Brazil, and Mexico

Characteristics	α -HPV 27		ν -HPV 41		β -HPV 5		β -HPV 12		β -HPV 14	
	OR	AOR (95%CI)	OR	AOR (95%CI)	OR	AOR (95%CI)	OR	AOR (95%CI)	OR	AOR (95%CI)
Country										
U.S.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Brazil	1.28	1.54 (0.57 - 4.12)	1.66	1.02 (0.37 - 2.81)	2.53	4.14 (1.49 - 11.49)	4.43	10.00 (2.86 - 34.93)	3.13	7.14 (2.18 - 23.4)
Mexico	0.64	0.46 (0.10 - 2.07)	1.12	0.53 (0.14 - 2.06)	0.27	0.35 (0.04 - 2.94)	0.57	0.21 (0.03 - 1.58)	0.60	0.40 (0.04 - 4.23)
Age, Years										
18-30	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
31-44	1.29	1.27 (0.62 - 2.62)	1.06	0.89 (0.45 - 1.75)	1.68	2.09 (0.91 - 4.79)	2.66	2.64 (0.99 - 7.05)	2.37	3.83 (1.32 - 11.11)
45-70	1.27	1.02 (0.37 - 2.83)	1.25	0.96 (0.39 - 2.41)	1.50	1.52 (0.49 - 4.72)	3.35	2.72 (0.82 - 9.10)	3.35	5.59 (1.63 - 19.18)
Race										
White	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Black	0.40	0.43 (0.14 - 1.31)	0.33	0.38 (0.11 - 1.32)	1.00	0.77 (0.31 - 1.96)	0.53	0.56 (0.17 - 1.84)	1.04	0.93 (0.31 - 2.83)
Asian/American Indian/Alaska Native	0.62	0.76 (0.16 - 3.61)	1.50	0.84 (0.18 - 3.94)	0.31	0 (NE)	0.39	0.00 (NE)	1.04	1.60 (0.31 - 8.33)
Other	0.55	1.37 (0.34 - 5.60)	0.84	1.18 (0.33 - 4.20)	0.18	1.17 (0.17 - 7.89)	0.28	5.19 (0.89 - 30.43)	0.35	2.60 (0.30 - 22.69)
Education										
≤ 12	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
13-15	0.94	0.80 (0.34 - 1.93)	1.11	1.02 (0.45 - 2.32)	0.99	1.09 (0.44 - 2.70)	1.27	1.78 (0.64 - 5.00)	2.23	3.86 (1.39 - 10.67)
≥ 16	2.08	1.87 (0.91 - 3.86)	1.68	1.80 (0.89 - 3.63)	1.49	1.48 (0.64 - 3.41)	2.19	2.08 (0.82 - 5.25)	1.81	1.93 (0.68 - 5.50)
Circumcision										
No	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Yes	1.25	1.30 (0.56 - 3.01)	0.59	0.56 (0.23 - 1.34)	1.63	2.66 (1.14 - 6.18)	1.20	2.40 (0.98 - 5.88)	1.32	2.63 (1.01 - 6.88)
No. of Female LTP										
0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1-3	0.65	0.78 (0.29 - 2.09)	0.61	0.61 (0.19 - 1.93)	0.85	1.20 (0.35 - 4.16)	0.79	1.21 (0.24 - 6.07)	1.46	2.06 (0.47 - 9.07)
4-18	0.39	0.41 (0.16 - 1.08)	1.20	1.17 (0.43 - 3.18)	0.87	0.80 (0.25 - 2.53)	1.41	1.36 (0.33 - 5.66)	1.23	1.13 (0.28 - 4.64)
≥19	0.60	0.47 (0.16 - 1.34)	0.69	0.59 (0.18 - 1.93)	1.05	0.50 (0.14 - 1.75)	1.46	0.70 (0.15 - 3.24)	0.79	0.41 (0.08 - 2.04)
No. of Male LTP										
0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1	0.44	0.46 (0.06 - 3.72)	0.79	0.77 (0.17 - 3.55)	1.78	1.47 (0.36 - 5.94)	0.71	0.45 (0.05 - 3.76)	0.00	0.00 (NE)
≥2	3.13	1.87 (0.80 - 4.35)	1.64	1.30 (0.51 - 3.31)	3.09	1.43 (0.57 - 3.55)	3.54	1.45 (0.54 - 3.84)	3.54	1.65 (0.60 - 4.56)

Final model was selected through backward stepwise elimination with significance level of $p\text{-value} \leq 0.1$ for retention in the model. Country, age, race, marital status, education, smoking alcohol consumption, circumcision, # of female LTP, and # of male LTP were loaded to the model while forcing country and age (design factors) to stay in the model.

Significant results are highlighted in bold.

Abbreviations: OR, unadjusted OR; AOR, adjusted odds ratio; CI, confidence interval; LTP, lifetime sex partners.

Supplement Table 2. Factors independently associated with β cutaneous HPV seropositivity among men residing in the U.S., Brazil, and Mexico

Characteristics	β -HPV 22		β -HPV 24	
	OR	AOR (95%CI)	OR	AOR (95%CI)
Country				
U.S.	1.00	1.00	1.00	1.00
Brazil	1.77	1.49 (0.50 - 4.45)	1.88	3.96 (1.44 - 10.89)
Mexico	0.48	0.11 (0.02 - 0.58)	0.51	0.87 (0.12 - 6.14)
Age, Years				
18-30	1.00	1.00	1.00	1.00
31-44	2.34	2.56 (1.06 - 6.20)	1.61	1.46 (0.66 - 3.21)
45-70	3.03	3.36 (1.16 - 9.75)	1.74	1.47 (0.52 - 4.15)
Race				
White	1.00	1.00	1.00	1.00
Black	1.28	1.16 (0.45 - 3.04)	1.95	1.87 (0.79 - 4.41)
Asian/American Indian/Alaska Native	0.45	0.65 (0.08 - 5.57)	0.89	1.58 (0.33 - 7.65)
Other	0.54	3.67 (0.82 - 16.43)	0.46	1.61 (0.26 - 10.17)
Education				
≤ 12	1.00	1.00	1.00	1.00
13-15	1.02	1.10 (0.42 - 2.85)	1.38	1.55 (0.63 - 3.84)
≥ 16	2.04	1.72 (0.74 - 3.96)	2.33	2.43 (1.08 - 5.48)
Circumcision				
No	1.00	1.00	1.00	1.00

Yes	0.86	0.77 (0.30 - 1.97)	1.79	2.43 (1.09 - 5.42)
No. of Female LTP				
0	1.00	1.00	1.00	1.00
1-3	0.61	0.99 (0.30 - 3.31)	0.45	0.59 (0.18 - 1.94)
4-18	0.63	0.79 (0.26 - 2.39)	0.67	0.73 (0.26 - 2.04)
≥19	0.78	0.52 (0.15 - 1.76)	0.65	0.46 (0.15 - 1.46)
No. of Male LTP				
0	1.00	1.00	1.00	1.00
1	0.00	0.00 NE)	1.18	1.22 (0.25 - 5.90)
≥2	4.46	2.32 (0.96 - 5.57)	4.44	2.55 (1.07 - 6.05)

Final model was selected through backward stepwise elimination with significance level of $p\text{-value} \leq 0.1$ for retention in the model. Country, age, race, marital status, education, smoking alcohol consumption, circumcision, # of female LTP, and # of male LTP were loaded to the model while forcing country and age (design factors) to stay in the model.

Significant results are highlighted in bold.

Abbreviations: OR, unadjusted OR; AOR, adjusted odds ratio; CI, confidence interval; LTP, lifetime sex partners.