

Table 1.

Baseline characteristics

	2% PRO2000 [*] (n=2734)	0.5% PRO2000 (n=3326)	Placebo (n=3325)
Demographic			
Age (years)			
15–24	1022/2734 (37%)	1249/3326 (38%)	1267/3324 (38%)
25–34	955/2734 (35%)	1076/3326 (32%)	1096/3324 (33%)
35–44	532/2734 (19%)	723/3326 (22%)	702/3324 (21%)
≥45	225/2734 (8%)	278/3326 (8%)	259/3324 (8%)
Education			
None	177/2734 (6%)	240/3326 (7%)	233/3324 (7%)
Primary	1927/2734 (70%)	2309/3326 (69%)	2271/3324 (68%)
Secondary or higher	630/2734 (23%)	777/3326 (23%)	820/3324 (25%)
Medical history (ever)			
Non-menstrual bleeding	266/2734 (10%)	339/3326 (10%)	307/3325 (9%)
Sores or ulcers	294/2734 (11%)	357/3326 (11%)	342/3325 (10%)
Unusual genital discomfort	656/2734 (24%)	786/3326 (24%)	820/3325 (25%)
Unusual genital discharge	686/2734 (25%)	796/3326 (24%)	820/3325 (25%)
Pain during sex	140/2734 (5%)	181/3326 (5%)	163/3325 (5%)
Other genital disorders	22/2734 (1%)	21/3326 (1%)	28/3325 (1%)
Positive laboratory results			
<i>Chlamydia trachomatis</i>	202/2698 (7%)	256/3293 (8%)	266/3295 (8%)
<i>Neisseria gonorrhoeae</i>	93/2698 (3%)	110/3293 (3%)	119/3295 (4%)
Herpes simplex virus type 2 seropositive	1622/2725 (60%)	2029/3312 (61%)	1982/3311 (60%)
Syphilis [†]	106/2726 (4%)	116/3300 (4%)	137/3304 (4%)
<i>Trichomonas vaginalis</i>	268/2723 (10%)	312/3314 (9%)	314/3311 (9%)
Behavioural			
Effective contraception [‡]	1514/2732 (55%)	1850/3326 (56%)	1873/3325 (56%)
Sex acts in previous week			
0	542/2732 (20%)	627/3326 (19%)	610/3325 (19%)
1	433/2732 (16%)	573/3326 (17%)	534/3325 (17%)
≥2	1754/2732 (64%)	2124/3326 (64%)	2178/3325 (64%)
Missing/unknown	3/2732 (<1%)	2/3326 (<1%)	3/3325 (<1%)
Partners in previous week (median [IQR])	1 (1–1)	1 (1–1)	1 (1–1)
Condom use at last sex act	1500/2732 (55%)	1894/3326 (57%)	1826/3325 (55%)
Anal sex in previous 4 weeks	28/2732 (1%)	42/3326 (1%)	31/3325 (1%)

Data are n/n of participants with reported data (%) unless otherwise stated.

* 2% PRO2000 gel was discontinued Feb 14, 2008.

† Active syphilis was defined on the basis of rapid plasma reagin titre.

‡ Sterilisation, intrauterine contraceptive device, or use of injected, implanted, or oral contraception.

Table 2.

Primary efficacy outcome: HIV-1 incidence in the primary and secondary efficacy analyses

	End of study		Censored at 2% PRO2000 gel discontinuation, Feb 14, 2008		
	0.5% PRO2000 (n=3326)	Placebo (n=3325)	2% PRO2000 (n=2734)	0.5% PRO2000 (n=2732)	Placebo (n=2722)
Primary efficacy analysis*					
Participants	3156	3112	2591	2587	2543
Woman-years of follow-up	2873	2836	1741	1732	1717
Seroconversions	130	123	82	67	67
Incidence [†]	4.5 (3.8–5.4)	4.3 (3.6–5.2)	4.7 (3.8–5.8)	3.9 (3.0–4.9)	3.9 (3.1–5.0)
Hazard ratio	1.05 (0.82–1.34)	1	1.21 (0.88–1.68)	0.99 (0.70–1.39)	1
p value	0.71	..	0.24	0.94	..
Second efficacy analysis[‡]					
Participants	3156	3112	2591	2587	2543
Woman-years of follow-up	3133	3099	1847	1846	1832
Seroconversions	145	143	86	70	77
Incidence [†]	4.6 (3.9–5.4)	4.6 (3.9–5.4)	4.7 (3.8–5.8)	3.8 (3.0–4.8)	4.2 (3.4–5.3)
Hazard ratio	1.00 (0.79–1.26)	1	1.11 (0.82–1.51)	0.90 (0.65–1.24)	1
p value	0.99	..	0.50	0.53	..

Data are n or n (95% CI) unless otherwise stated. ..=not applicable.

* All enrolled participants, excluding those with HIV-1 infection at enrolment, those without follow-up data for HIV-1 infection, and censored at 52 weeks (plus 6 week window for final visit) or pregnancy.

[‡] Equivalent to primary efficacy analysis, but not censored for pregnancy or at week 52.

[†] Per 100 woman-years.

Table 3.

Secondary efficacy outcomes

		End of study		Censored at 2% PRO2000 gel discontinuation, Feb 14, 2008		
		0·5% PRO2000 (n=3326)	Placebo (n=3325)	2% PRO2000 (n=2734)	0·5% PRO2000 (n=2732)	Placebo (n=2722)
Herpes simplex virus type 2						
Infection by week 40		59/890 (6·6%)	66/907 (7·3%)	18/395 (4·6%)	22/374 (5·9%)	22/380 (5·8%)
	Odds ratio	0·90 (0·63–1·30)	1	0·78 (0·41–1·47)	1·01 (0·55–1·87)	1
	p value	0·59	..	0·44	0·55	..
Infection by week 52		109/919 (11·9%)	115/888 (13·0%)	34/297 (11·5%)	34/292 (11·6%)	32/284 (11·3%)
	Odds ratio	0·90 (0·68–1·20)	1	1·01 (0·61–1·70)	1·04 (1·62–1·73)	1
	p value	0·48	..	0·95	0·89	..
Neisseria gonorrhoeae						
Infection at week 24 (±4 weeks)		77/2674 (2·9%)	74/2597 (2·9%)	42/1613 (2·6%)	44/1632 (2·7%)	48/1550 (3·1%)
	Odds ratio	1·01 (0·73–1·40)	1	0·85 (0·56–1·29)	0·88 (0·56–1·29)	1
	p value	0·95	..	0·44	0·54	..
Chlamydia trachomatis						
Infection at week 24 (±4 weeks)		159/2674 (6·0%)	164/2597 (6·3%)	79/1611 (4·9%)	95/1632 (5·9%)	90/1570 (5·8%)
	Odds ratio	0·94 (0·75–1·17)	1	0·82 (0·60–1·11)	0·98 (0·73–1·31)	1
	p value	0·58	..	0·20	0·90	..

Data are n/n (%) or n (95% CI) unless otherwise stated. ..=not applicable.

Table 4.

Reported serious adverse events, selected genital adverse events, and primary safety events

		End of study		Censored at 2% PRO2000 gel discontinuation Feb 14, 2008		
		0·5% PRO2000 (n=3326)	Placebo (n=3325)	2% PRO2000 (n=2734)	0·5% PRO2000 (n=2732)	Placebo (n=2722)
	Attended at least one visit after enrolment	3258	3223	2571	2524	2511
	Primary safety events [‡]	163	137	92	99	85
	Woman-years of follow-up	3349	3317	1956	1929	1911
	Primary safety event (first)	154	128	88	96	80
	Incidence [‡]	4·6 (3·9–5·4)	3·9 (3·2–4·6)	4·5 (3·7–5·5)	5·0 (4·1–6·1)	4·2 (3·4–5·2)
	Hazard ratio	1·18 (0·93–1·49)	1	1·05 (0·78–1·43)	1·19 (0·88–1·60)	1
	p value	0·17	..	0·74	0·26	..
	Adverse events					
	Non-menstrual bleeding	551 (17%)	527 (16%)	320 (13%)	339 (13%)	318 (13%)
	Ulcers (internal)	32 (1%)	38 (1%)	20 (1%)	22 (1%)	25 (1%)
	Ulcers (external)	161 (5%)	157 (5%)	121 (5%)	111 (4%)	116 (5%)
	Oedema (internal)	11 (<1%)	15 (<1%)	5 (<1%)	5 (<1%)	9 (<1%)
	Oedema (external)	8 (<1%)	5 (<1%)	6 (<1%)	3 (<1%)	5 (<1%)
	Erythema (internal)	201 (6%)	201 (6%)	134 (5%)	117 (5%)	122 (5%)
	Erythema (external)	54 (2%)	35 (1%)	39 (2%)	32 (1%)	29 (1%)
	Itching	349 (11%)	310 (10%)	214 (9%)	247 (10%)	232 (9%)
	Burning	72 (2%)	56 (2%)	52 (2%)	53 (2%)	46 (2%)
	Other genital events	379 (12%)	356 (11%)	232 (9%)	241 (10%)	239 (10%)
	Other non-genital events	685 (21%)	631 (20%)	442 (18%)	435 (17%)	424 (17%)
	Serious adverse events [‡]					
	Deaths	9 (<1%)	5 (<1%)	7 (<1%) [§]	4 (<1%)	0
	Other serious adverse events	142 (4%)	119 (4%)	86 (3%)	95 (3%)	75 (3%)

Data are n (%) or n (95% CI). ..=not applicable.

* Defined as adverse events of grade 3 or more reported any time after enrolment. For women with more than one event, the time-to-event analysis uses the first event only.

† Per 100 woman-years.

‡ Serious adverse events were death, an immediate threat to life, admission to hospital, disability, congenital abnormality, vaginal oedema with sloughing, profuse non-menstrual bleeding, and cervical or gynaecological cancer.

§ Two additional deaths were reported after Feb 14, 2008.