

## Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

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<b>Table S1. Enrollment, by study site</b>		
<b>Country: Site</b>	<b>Total Number Screened</b>	<b>Total Number Enrolled</b>
Malawi: Blantyre site	199	130
Malawi: Lilongwe site	200	142
South Africa: Cape Town site	217	166
South Africa: Durban – eThekweni site	736	244
South Africa: Durban – Botha's Hill site	436	180
South Africa: Durban – Chatsworth site	411	150
South Africa: Durban – Isipingo site	314	117
South Africa: Durban – Tongaat site	351	103
South Africa: Durban – Umkomaas site	259	103
South Africa: Durban – Verulam site	346	150
South Africa: Johannesburg site	401	213
Uganda: Kampala site	408	253
Zimbabwe: Chitungwiza – Seke South site	434	224
Zimbabwe: Chitungwiza – Zengeza site	401	224
Zimbabwe: Harare – Spilhaus site	403	230

**Table S2. Study inclusion and exclusion criteria**

Women must have met all of the following criteria to be eligible for inclusion in the study.

**Inclusion  
Criteria**

- 1) Age 18 through 45 years (inclusive) at screening,
- 2) Able and willing to provide written informed consent to be screened for and to take part in the study
- 3) Able and willing to provide adequate locator information
- 4) HIV uninfected based on testing performed at screening and enrollment
- 5) Per participant report, sexually active, defined as having vaginal intercourse at least once in the 3 months prior to screening
- 6) Using an effective method of contraception at enrollment, and intending to use an effective method for the duration of study participation; effective methods include hormonal methods (except contraceptive rings); intrauterine device (IUD); and sterilization (of participant)
- 7) At screening and enrollment, agrees not to participate in other research studies involving drugs, medical devices, vaginal products, or vaccines for the duration of study participation. *Note: Tampons could be used for the duration of the trial.*

Women who met any of the following criteria were excluded from the study.

**Exclusion  
Criteria**

- 1) Per participant report at screening:
  - a. Intends to become pregnant during study participation
  - b. Plans to relocate away from the study site during study participation
  - c. Plans to travel away from the study site for more than 8 consecutive weeks during study participation
- 2) Pregnant
- 3) Currently breastfeeding
- 4) Diagnosed with urinary tract infection (UTI), unless treated and symptoms are resolved prior to enrollment
- 5) Diagnosed with pelvic inflammatory disease, an STI or reproductive tract infection requiring treatment per current WHO guidelines, unless treated and symptoms are resolved prior to enrollment
- 6) Has a clinically apparent Grade 2 or higher pelvic exam finding. Cervical bleeding associated with speculum insertion and/or specimen collection judged to be within the range of normal is not exclusionary.
- 7) Participant report and/or clinical evidence of any of the following:
  - a. Known adverse reaction to any of the study products (ever)
  - b. Known adverse reaction to latex (ever)
  - c. Chronic vaginal candidiasis
  - d. Non-therapeutic injection drug use in the 12 months prior to Screening
  - e. Post-exposure prophylaxis (PEP) for HIV-1 exposure within 6 months prior to enrollment
  - f. Last pregnancy outcome 90 days or less prior to enrollment
  - g. Gynecologic or genital procedure (e.g., tubal ligation, dilation and curettage, piercing) 90 days or less prior to enrollment
  - h. Participation in any other research study involving drugs, medical devices, vaginal products, or vaccines, within 60 days of enrollment
  - i. Participation in any HIV prevention study using systemic or topical antiretroviral medications, within 12 months of enrollment
  - j. As determined by the site investigator, any significant uncontrolled active or chronic cardiovascular, renal, liver, hematologic, neurologic, gastrointestinal, psychiatric, endocrine, respiratory, immunologic disorder or infectious disease, including active tuberculosis
- 8) Has any of the following laboratory abnormalities at Screening Visit:
  - a. Aspartate aminotransferase (AST) or alanine transaminase (ALT) Grade 1 or higher
  - b. Creatinine Grade 2 or higher
  - c. Hemoglobin Grade 2 or higher
  - d. Platelet count Grade 1 or higher
  - e. Pap result Grade 2 or higher
- 9) Has any other condition that, in the opinion of the site investigator, would preclude informed consent, make study participation unsafe, complicate interpretation of study outcome data, or otherwise interfere with achieving the study objectives

<b>Table S3. Site Institutional Review Boards/Ethics Committees</b>	
<b>Country: Site</b>	<b>Institutional Review Board / Ethics Committee</b>
Malawi: Blantyre site	National Health Sciences Research Committee of Malawi Johns Hopkins University Bloomberg School of Public Health Institutional Review Board
Malawi: Lilongwe site	National Health Sciences Research Committee of Malawi University of North Carolina at Chapel Hill Institutional Review Board
South Africa: Cape Town site	University of Cape Town: Human Research Ethics Committee
South Africa: Durban – eThekweni site	Biomedical Research Ethics Committee, University of KwaZulu-Natal
South Africa: Durban – Botha's Hill site	South African Medical Research Council Ethics Committee
South Africa: Durban – Chatsworth site	South African Medical Research Council Ethics Committee
South Africa: Durban – Isipingo site	South African Medical Research Council Ethics Committee
South Africa: Durban – Tongaat site	South African Medical Research Council Ethics Committee
South Africa: Durban – Umkomaas site	South African Medical Research Council Ethics Committee
South Africa: Durban – Verulam site	South African Medical Research Council Ethics Committee
South Africa: Johannesburg site	Wits Human Research Ethics Committee, University of Witwatersrand
Uganda: Kampala site	Joint Clinical Research Centre Institutional Review Board Johns Hopkins University School of Medicine Institutional Review Board
Zimbabwe: Chitungwiza – Seke South site	Medical Research Council of Zimbabwe Committee on Human Research, University of California - San Francisco
Zimbabwe: Chitungwiza – Zengeza site	Medical Research Council of Zimbabwe Committee on Human Research, University of California - San Francisco
Zimbabwe: Harare – Spilhaus site	Medical Research Council of Zimbabwe Committee on Human Research, University of California - San Francisco

**Table S4. Study visits and procedures**

	SCR	ENR	Monthly Visits	Quarterly Visits	Semi-Annual Visits	PUEV**	Study Exit/ Term. Visit
<b>ADMINISTRATIVE AND REGULATORY</b>							
Obtain informed consent	X	X					
Assign a unique Participant Identification (PTID) number	X						
Assess and/or confirm eligibility	X	X					
Collect/review/update locator information	X	X	X	X	X	X	X
Randomization		X					
Provide reimbursement	X	X	X	X	X	X	X
Schedule next visit	*	X	X	X	X	X	*
<b>BEHAVIORAL</b>							
Contraceptive counseling	X	X	X	X	X		
Protocol adherence, including VR adherence counseling		X	X	X	X		
HIV/STI risk reduction counseling	X	X	X	X	X	X	X
HIV pre- and post-test counseling	X	X	X	X	X	X	X
Conduct a behavioral assessment includes sexual activity, condom use, and intravaginal practices		X		X	X	X	X
Conduct an adherence assessment			X	X	X	X	
Conduct an acceptability assessment				X	X	X	
Conduct social harms assessment				X	X	X	
<b>CLINICAL</b>							
Obtain/update medical and menstrual history	X	X	X	X	X	X	X
Obtain/update concomitant medications	X	X	X	X	X	X	X
Conduct a physical examination	X	X	*	X	X	X	
Perform a pelvic exam	X	* T	* T	* T	X	X	* T
Prescribe contraceptives	*	*	*	*	*	*	*
Disclose available test results		X	X	X	X	X	X
Record/update AEs			X	X	X	X	X
Treat or prescribe treatment for UTIs/RTIs/STIs or refer for other findings	*	*	*	*	*	*	*
<b>LABORATORY</b>							
URINE	hCG	X	X	X	X	X	X
	Urine culture	*	*	*	*	*	*
	NAAT for GC/CT	X	*	*	*	X	*
BLOOD	HIV-1 Serology	X	X	X	X	X	X
	CBC with platelets	X			X	X	
	Chemistries	X			X	X	
	Syphilis serology	X		*	*	*	X
PELVIC	Plasma		◇		X	X	X
	Study VR adherence assessment(s)			*	*	*	*
	Rapid test for Trichomonas	X	* T	* T	* T	X	* T
	Herpes lesion testing	* T	* T	* T	* T	* T	* T
	Vaginal fluid pH	X T	* T	* T	* T	X	* T
	KOH wet mount for candidiasis	* T	* T	* T	* T	* T	* T
	Saline wet mount for BV	* T	* T	* T	* T	* T	* T
	Gram stain	X				X	X
	Vaginal fluid		X	X	X	X	X
	Pap Smear interpretation	*					X
Endocervical swab	X				X	X	
<b>STUDY PRODUCT/ SUPPLIES</b>							
Provision of study specified condoms	X	X	X	X	X	X	X
Provision of study VR instructions		X	*	*	*		
Provision of one study VR for insertion		X	X	X	X		
Participant or clinician/designee to remove used study VR			X	X	X	X	
Digital exam(s) by clinician to check VR placement		X	⊞ *	*	*		
Demonstrated attempt to remove and reinsert the ring		X					
Collection of used study VR			X	X	X	X	
Dispense a bottle of water, at select sites		*	*	*	*		

X mandatory, \* If indicated, T per local standard of care, ◇= for archive, ⊞= required at Month 1, \*\*= When the PUEV coincides with the timing of a Semi-Annual Visit (Months 6, 12, 18, etc.), all procedures except for the provision of study product and related procedures will be conducted

**Table S5. Statistical design and analysis approach**

The trial was designed with 90% power to detect a 60% reduction in risk of HIV-1 infection, with a one-sided alpha of 0.025. Like other trials of novel HIV-1 prevention interventions, the trial was powered so that lower bound of the 95% confidence interval, if the reduction in HIV-1 achieved 60%, would exclude a 25% reduction in risk.

This use of a non-zero null hypothesis for power calculations was done for several reasons. First, some in the field have argued results would garner greater confidence by public health policymakers for later implementation if interventions were demonstrated to have effects that were definitively separate from zero. Second, if behavioral disinhibition or other factors that might undermine HIV-1 protection effectiveness in real-world settings were to occur, then products with higher HIV-1 protection estimates in clinical trials may have some cushion for implementation. Third, when this trial was designed it was to be the only phase III trial of this product, and thus, for regulatory reasons a more strongly powered study was desired – specifically, if a single pivotal trial is planned, then its power must be greater than that of a single well-powered trial (for US FDA requirements, at least one and one-half times the power of a single trial); one way to achieve that additional power is to have a non-zero null and to conduct interim monitoring of effectiveness against that non-zero null (thus ensuring that the trial would not stop too early for too small of an effect that would not as a single trial meet regulatory guidelines).

However, several features of the study and developments in the field contributed to the analysis plan for the present study. First, from its inception, the statistical plan for this trial anticipated a primary analysis against a standard null of zero, with secondary analyses done against the non-zero null. Consistent with this approach, interim monitoring for futility in the trial was against a null of zero, not against a null of 25%. Second, after this trial was designed, The Ring Study, a second evaluation of the dapivirine vaginal ring, was expanded from an extended phase II study to be a phase III study. The design of the present study was not changed, but the regulatory plan to consider only one pivotal trial for HIV-1 protection effects was modified to include both studies. Finally, other trials in this field that have been designed with non-zero null effects have presented their primary findings against the standard zero null – defined in the table below. The iPrEx example is particularly important. That trial was designed against a non-zero null of 30%, but it failed to rule out that effect in its primary analysis (its lower bound of

the 95% confidence interval was 15%). However, in combination with other data from the field, it served as a pivotal study for the regulatory approval and normative guidance regarding combination emtricitabine/tenofovir disoproxil fumarate as daily oral pre-exposure prophylaxis against HIV-1 acquisition.

<b>Table S5. Prior placebo-controlled phase IIB/III studies of HIV-1 antiretroviral prophylaxis: null hypothesis for design and for primary analysis</b>			
<b>Study</b>	<b>Null hypothesis for design</b>	<b>Null hypothesis for primary analysis</b>	<b>Final HIV-1 protection effectiveness estimate (95% CI)</b>
<b>IPERGAY<sup>1</sup></b>	0%	0%	86% (40, 98)
<b>Partners PrEP Study<sup>2*</sup></b>	30%	0%	75% (55, 87)
<b>TDF2<sup>3</sup></b>	10%	0%	62% (22, 83)
<b>BTS<sup>4</sup></b>	10%	0%	49% (10, 72)
<b>iPrEx<sup>5</sup></b>	30%	0%	44% (15, 63)
<b>FEM-PrEP<sup>6</sup></b>	25%	0%	6% (-52, 41)
<b>VOICE<sup>7*</sup></b>	25%	0%	-4% (-49, 27)
<b>CAPRISA 004<sup>8</sup></b>	0%	0%	39% (6, 60)
<b>FACTS 001<sup>9</sup></b>	0%	0%	0% (-40, 30)

\* For the Partners PrEP Study and VOICE, where more than one active arm was tested, only the oral emtricitabine/tenofovir disoproxil fumarate pill effectiveness estimate is provided, as an example.

**Table S6. Primary safety events, detailed listing**

The primary safety endpoint for the study was defined as a composite of any serious adverse event, any death, any Grade 3 and 4 adverse events, and any Grade 2 adverse event assessed by the study clinicians as related to the study product. Table S6 presents all primary safety events by type of adverse event, treatment group, grade, and relatedness assessment: serious adverse events (Table S6a), deaths (Table S6b), Grade 4 events (Table S6c), Grade 3 events (Table S6d), and Grade 2 events assessed as related (Table S6e). Serious adverse events would encompass the deaths as well as any of the other primary safety events deemed to be serious, and thus there is duplication between Table S6a and some parts of the other tables.

Table S6a. Serious adverse events (page 1 of 14)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Participants with Serious AEs</b>			
Not Related	48 (3.6%)	52 (4.0%)	100 (3.8%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	48 (3.6%)	52 (4.0%)	100 (3.8%)
<b>Blood and lymphatic system disorders</b>			
Hypochromic anaemia			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
<b>Congenital, familial and genetic disorders</b>			
Arnold-Chiari malformation			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Congenital anomaly in offspring			
Not Related	2 (0.2%)	5 (0.4%)	7 (0.3%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	2 (0.2%)	5 (0.4%)	7 (0.3%)
<b>Gastrointestinal disorders</b>			
Abdominal pain			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)

Table S6a. Serious adverse events (page 2 of 14)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Gastrointestinal disorders (continued)</b>			
Abdominal pain upper			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Diarrhoea			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Gastritis			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Umbilical hernia			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
<b>General disorders and administration site conditions</b>			
Oedema peripheral			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Pyrexia			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)

Table S6a. Serious adverse events (page 3 of 14)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Hepatobiliary disorders</b>			
Cholecystitis			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Cholecystitis acute			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Cholelithiasis			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
<b>Immune system disorders</b>			
Anaphylactic shock			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
<b>Infections and infestations</b>			
Abscess limb			
Not Related	0 (0.0%)	2 (0.2%)	2 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	2 (0.2%)	2 (0.1%)

Table S6a. Serious adverse events (page 4 of 14)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Infections and infestations (continued)</b>						
Appendicitis						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Bartholin's abscess						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
Cellulitis						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
Cervicitis						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Dysentery						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Gastroenteritis						
Not Related	2	(0.2%)	0	(0.0%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	0	(0.0%)	2	(0.1%)

**Table S6a. Serious adverse events (page 5 of 14)**

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Infections and infestations (continued)</b>						
Infected bites						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Lower respiratory tract infection						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Malaria						
Not Related	2	(0.2%)	3	(0.2%)	5	(0.2%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	3	(0.2%)	5	(0.2%)
Meningitis tuberculous						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Pelvic inflammatory disease						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Peritonsillar abscess						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)

Table S6a. Serious adverse events (page 6 of 14)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Infections and infestations (continued)</b>						
Pneumonia						
Not Related	2	(0.2%)	0	(0.0%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	0	(0.0%)	2	(0.1%)
Postpartum sepsis						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Pulmonary tuberculosis						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
Subcutaneous abscess						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Tuberculosis						
Not Related	0	(0.0%)	2	(0.2%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	2	(0.2%)	2	(0.1%)
Tuberculosis gastrointestinal						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)

Table S6a. Serious adverse events (page 7 of 14)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Infections and infestations (continued)</b>						
Upper respiratory tract infection						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Urinary tract infection						
Not Related	0	(0.0%)	2	(0.2%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	2	(0.2%)	2	(0.1%)
Viral infection						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Wound infection						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
<b>Injury, poisoning and procedural complications</b>						
Abdominal injury						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Ankle fracture						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)

Table S6a. Serious adverse events (page 8 of 14)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Injury, poisoning and procedural complications (continued)</b>						
Back injury						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Burns first degree						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Face injury						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Fibula fracture						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Head injury						
Not Related	2	(0.2%)	1	(0.1%)	3	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	1	(0.1%)	3	(0.1%)
Joint dislocation						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)

**Table S6a. Serious adverse events (page 9 of 14)**

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Injury, poisoning and procedural complications (continued)</b>						
Laceration						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Limb injury						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Lower limb fracture						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Procedural pain						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Snake bite						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Stab wound						
Not Related	2	(0.2%)	2	(0.2%)	4	(0.2%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	2	(0.2%)	4	(0.2%)

Table S6a. Serious adverse events (page 10 of 14)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Injury, poisoning and procedural complications (continued)</b>						
Thermal burn						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
<b>Investigations</b>						
Aspartate aminotransferase increased						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Platelet count decreased						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
<b>Metabolism and nutrition disorders</b>						
Diabetes mellitus						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
<b>Nervous system disorders</b>						
Cerebrovascular accident						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)

Table S6a. Serious adverse events (page 11 of 14)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Nervous system disorders (continued)</b>						
Epilepsy						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Headache						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Hepatic encephalopathy						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Seizure						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
<b>Pregnancy, puerperium and perinatal conditions</b>						
Post abortion haemorrhage						
Not Related	4	(0.3%)	6	(0.5%)	10	(0.4%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	4	(0.3%)	6	(0.5%)	10	(0.4%)
Premature labour						
Not Related	1	(0.1%)	2	(0.2%)	3	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	2	(0.2%)	3	(0.1%)

**Table S6a. Serious adverse events (page 12 of 14)**

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Pregnancy, puerperium and perinatal conditions (continued)</b>						
Ruptured ectopic pregnancy						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
<b>Psychiatric disorders</b>						
Bipolar disorder						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Confusional state						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Depression						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Intentional self-injury						
Not Related	2	(0.2%)	2	(0.2%)	4	(0.2%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	2	(0.2%)	4	(0.2%)
Mania						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)

Table S6a. Serious adverse events (page 13 of 14)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Psychiatric disorders (continued)</b>			
Suicidal ideation			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Suicide attempt			
Not Related	1 (0.1%)	2 (0.2%)	3 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	2 (0.2%)	3 (0.1%)
<b>Reproductive system and breast disorders</b>			
Adnexa uteri cyst			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Adnexa uteri mass			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Metrorrhagia			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Ovarian cyst			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)

Table S6a. Serious adverse events (page 14 of 14)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Respiratory, thoracic and mediastinal disorders</b>						
Dyspnoea						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Pulmonary embolism						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
<b>Skin and subcutaneous tissue disorders</b>						
Lipohypertrophy						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
<b>Vascular disorders</b>						
Hypertension						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)

**Table S6b. Deaths (page 1 of 1)**

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Participants with Grade 5 AEs</b>			
Not Related	3 (0.2%)	4 (0.3%)	7 (0.3%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	3 (0.2%)	4 (0.3%)	7 (0.3%)
<b>Infections and infestations</b>			
Pulmonary tuberculosis			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Tuberculosis gastrointestinal			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
<b>Injury, poisoning and procedural complications</b>			
Abdominal injury			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Stab wound			
Not Related	1 (0.1%)	2 (0.2%)	3 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	2 (0.2%)	3 (0.1%)
<b>Respiratory, thoracic and mediastinal disorders</b>			
Pulmonary embolism			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)

Table S6c. Grade 4 events (page 1 of 7)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Participants with Grade 4 AEs</b>			
Not Related	23 (1.7%)	22 (1.7%)	45 (1.7%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	23 (1.7%)	22 (1.7%)	45 (1.7%)
<b>Blood and lymphatic system disorders</b>			
Hypochromic anaemia			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Neutropenia			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Thrombocytopenia			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
<b>Congenital, familial and genetic disorders</b>			
Arnold-Chiari malformation			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)

Table S6c. Grade 4 events (page 2 of 7)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Gastrointestinal disorders</b>			
Abdominal pain upper			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
<b>Hepatobiliary disorders</b>			
Liver disorder			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
<b>Immune system disorders</b>			
Anaphylactic shock			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
<b>Infections and infestations</b>			
Acute hepatitis B			
Not Related	0 (0.0%)	3 (0.2%)	3 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	3 (0.2%)	3 (0.1%)
Dysentery			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)

**Table S6c. Grade 4 events (page 3 of 7)**

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Infections and infestations (continued)</b>			
Malaria			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Meningitis tuberculous			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Postpartum sepsis			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
<b>Injury, poisoning and procedural complications</b>			
Alcohol poisoning			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Stab wound			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)

Table S6c. Grade 4 events (page 4 of 7)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Investigations</b>						
Alanine aminotransferase increased						
Not Related	3	(0.2%)	1	(0.1%)	4	(0.2%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	3	(0.2%)	1	(0.1%)	4	(0.2%)
Aspartate aminotransferase increased						
Not Related	1	(0.1%)	2	(0.2%)	3	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	2	(0.2%)	3	(0.1%)
Lymphocyte count decreased						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Platelet count decreased						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
<b>Metabolism and nutrition disorders</b>						
Abnormal loss of weight						
Not Related	2	(0.2%)	2	(0.2%)	4	(0.2%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	2	(0.2%)	4	(0.2%)

Table S6c. Grade 4 events (page 5 of 7)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Nervous system disorders</b>			
Cerebrovascular accident			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Epilepsy			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
<b>Pregnancy, puerperium and perinatal conditions</b>			
Post abortion haemorrhage			
Not Related	1 (0.1%)	1 (0.1%)	2 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	1 (0.1%)	2 (0.1%)
Premature labour			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Ruptured ectopic pregnancy			
Not Related	1 (0.1%)	1 (0.1%)	2 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	1 (0.1%)	2 (0.1%)

**Table S6c. Grade 4 events (page 6 of 7)**

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Psychiatric disorders</b>						
Bipolar disorder						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Depression						
Not Related	2	(0.2%)	0	(0.0%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	0	(0.0%)	2	(0.1%)
Intentional self-injury						
Not Related	2	(0.2%)	2	(0.2%)	4	(0.2%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	2	(0.2%)	4	(0.2%)
Suicidal ideation						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Suicide attempt						
Not Related	1	(0.1%)	2	(0.2%)	3	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	2	(0.2%)	3	(0.1%)
<b>Reproductive system and breast disorders</b>						
Metrorrhagia						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)

**Table S6c. Grade 4 events (page 7 of 7)**

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Vascular disorders</b>			
Hypertension			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)

**Table S6d. Grade 3 events (page 1 of 19)**

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Participants with Grade 3 AEs</b>						
Not Related	162	(12.3%)	151	(11.5%)	313	(11.9%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	162	(12.3%)	151	(11.5%)	313	(11.9%)
<b>Blood and lymphatic system disorders</b>						
Anaemia						
Not Related	1	(0.1%)	6	(0.5%)	7	(0.3%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	6	(0.5%)	7	(0.3%)
Anaemia of pregnancy						
Not Related	2	(0.2%)	0	(0.0%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	0	(0.0%)	2	(0.1%)
Hypochromic anaemia						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
Lymphopenia						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Microcytic anaemia						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)

Table S6d. Grade 3 events (page 2 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Blood and lymphatic system disorders (continued)</b>						
Neutropenia						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
Thrombocytopenia						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
<b>Cardiac disorders</b>						
Cardiac disorder						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
<b>Congenital, familial and genetic disorders</b>						
Congenital anomaly in offspring						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
<b>Gastrointestinal disorders</b>						
Abdominal pain						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)

Table S6d. Grade 3 events (page 3 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Gastrointestinal disorders (continued)</b>						
Diarrhoea						
Not Related	2	(0.2%)	1	(0.1%)	3	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	1	(0.1%)	3	(0.1%)
Diarrhoea haemorrhagic						
Not Related	2	(0.2%)	0	(0.0%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	0	(0.0%)	2	(0.1%)
Gastritis						
Not Related	3	(0.2%)	0	(0.0%)	3	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	3	(0.2%)	0	(0.0%)	3	(0.1%)
Nausea						
Not Related	0	(0.0%)	2	(0.2%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	2	(0.2%)	2	(0.1%)
Peptic ulcer						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Toothache						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)

Table S6d. Grade 3 events (page 4 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>General disorders and administration site conditions</b>			
Asthenia			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Oedema peripheral			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Pyrexia			
Not Related	2 (0.2%)	1 (0.1%)	3 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	2 (0.2%)	1 (0.1%)	3 (0.1%)
<b>Hepatobiliary disorders</b>			
Cholecystitis			
Not Related	2 (0.2%)	0 (0.0%)	2 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	2 (0.2%)	0 (0.0%)	2 (0.1%)
Cholecystitis acute			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Cholelithiasis			
Not Related	1 (0.1%)	2 (0.2%)	3 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	2 (0.2%)	3 (0.1%)

Table S6d. Grade 3 events (page 5 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Immune system disorders</b>			
Hypersensitivity			
Not Related	2 (0.2%)	1 (0.1%)	3 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	2 (0.2%)	1 (0.1%)	3 (0.1%)
<b>Infections and infestations</b>			
Abscess limb			
Not Related	0 (0.0%)	2 (0.2%)	2 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	2 (0.2%)	2 (0.1%)
Acute HIV infection			
Not Related	0 (0.0%)	2 (0.2%)	2 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	2 (0.2%)	2 (0.1%)
Appendicitis			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Bartholin's abscess			
Not Related	1 (0.1%)	1 (0.1%)	2 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	1 (0.1%)	2 (0.1%)
Cellulitis			
Not Related	1 (0.1%)	2 (0.2%)	3 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	2 (0.2%)	3 (0.1%)

Table S6d. Grade 3 events (page 6 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Infections and infestations (continued)</b>						
Dermatitis infected						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Diarrhoea infectious						
Not Related	0	(0.0%)	2	(0.2%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	2	(0.2%)	2	(0.1%)
Gastroenteritis						
Not Related	5	(0.4%)	7	(0.5%)	12	(0.5%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	5	(0.4%)	7	(0.5%)	12	(0.5%)
Genitourinary chlamydia infection						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Genitourinary tract gonococcal infection						
Not Related	6	(0.5%)	4	(0.3%)	10	(0.4%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	6	(0.5%)	4	(0.3%)	10	(0.4%)
Helminthic infection						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)

Table S6d. Grade 3 events (page 7 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Infections and infestations (continued)</b>						
Herpes zoster						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Infected bites						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Influenza						
Not Related	0	(0.0%)	2	(0.2%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	2	(0.2%)	2	(0.1%)
Lower respiratory tract infection						
Not Related	0	(0.0%)	2	(0.2%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	2	(0.2%)	2	(0.1%)
Malaria						
Not Related	5	(0.4%)	4	(0.3%)	9	(0.3%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	5	(0.4%)	4	(0.3%)	9	(0.3%)
Pelvic inflammatory disease						
Not Related	2	(0.2%)	2	(0.2%)	4	(0.2%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	2	(0.2%)	4	(0.2%)

Table S6d. Grade 3 events (page 8 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Infections and infestations (continued)</b>						
Peritonsillar abscess						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Pneumonia						
Not Related	2	(0.2%)	1	(0.1%)	3	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	1	(0.1%)	3	(0.1%)
Pulmonary tuberculosis						
Not Related	2	(0.2%)	2	(0.2%)	4	(0.2%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	2	(0.2%)	4	(0.2%)
Pyelonephritis						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
Sinusitis						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Subcutaneous abscess						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)

Table S6d. Grade 3 events (page 9 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Infections and infestations (continued)</b>						
Tonsillitis						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Tuberculosis						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Upper respiratory tract infection						
Not Related	0	(0.0%)	2	(0.2%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	2	(0.2%)	2	(0.1%)
Urinary tract infection						
Not Related	1	(0.1%)	3	(0.2%)	4	(0.2%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	3	(0.2%)	4	(0.2%)
Viral infection						
Not Related	0	(0.0%)	2	(0.2%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	2	(0.2%)	2	(0.1%)
Wound infection						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)

Table S6d. Grade 3 events (page 10 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Injury, poisoning and procedural complications</b>						
Ankle fracture						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
Back injury						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Face injury						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Fibula fracture						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Head injury						
Not Related	3	(0.2%)	2	(0.2%)	5	(0.2%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	3	(0.2%)	2	(0.2%)	5	(0.2%)
Joint dislocation						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)

Table S6d. Grade 3 events (page 11 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Injury, poisoning and procedural complications (continued)</b>						
Laceration						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
Limb injury						
Not Related	2	(0.2%)	0	(0.0%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	0	(0.0%)	2	(0.1%)
Lower limb fracture						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
Procedural pain						
Not Related	3	(0.2%)	0	(0.0%)	3	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	3	(0.2%)	0	(0.0%)	3	(0.1%)
Skin abrasion						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Snake bite						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)

Table S6d. Grade 3 events (page 12 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Injury, poisoning and procedural complications (continued)</b>						
Soft tissue injury						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Stab wound						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Thermal burn						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
Wrist fracture						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
<b>Investigations</b>						
Alanine aminotransferase increased						
Not Related	6	(0.5%)	6	(0.5%)	12	(0.5%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	6	(0.5%)	6	(0.5%)	12	(0.5%)
Aspartate aminotransferase increased						
Not Related	4	(0.3%)	7	(0.5%)	11	(0.4%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	4	(0.3%)	7	(0.5%)	11	(0.4%)

Table S6d. Grade 3 events (page 13 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Investigations (continued)</b>						
Blood bilirubin increased						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Blood pressure increased						
Not Related	3	(0.2%)	4	(0.3%)	7	(0.3%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	3	(0.2%)	4	(0.3%)	7	(0.3%)
Haemoglobin decreased						
Not Related	6	(0.5%)	5	(0.4%)	11	(0.4%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	6	(0.5%)	5	(0.4%)	11	(0.4%)
Lymphocyte count decreased						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Neutrophil count decreased						
Not Related	5	(0.4%)	7	(0.5%)	12	(0.5%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	5	(0.4%)	7	(0.5%)	12	(0.5%)
Platelet count decreased						
Not Related	0	(0.0%)	2	(0.2%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	2	(0.2%)	2	(0.1%)

Table S6d. Grade 3 events (page 14 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Metabolism and nutrition disorders</b>			
Abnormal loss of weight			
Not Related	51 (3.9%)	41 (3.1%)	92 (3.5%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	51 (3.9%)	41 (3.1%)	92 (3.5%)
Decreased appetite			
Not Related	10 (0.8%)	8 (0.6%)	18 (0.7%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	10 (0.8%)	8 (0.6%)	18 (0.7%)
Diabetes mellitus			
Not Related	5 (0.4%)	1 (0.1%)	6 (0.2%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	5 (0.4%)	1 (0.1%)	6 (0.2%)
Type 2 diabetes mellitus			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
<b>Musculoskeletal and connective tissue disorders</b>			
Back pain			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Musculoskeletal pain			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)

Table S6d. Grade 3 events (page 15 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Nervous system disorders</b>			
Dizziness			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Generalised tonic-clonic seizure			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Headache			
Not Related	3 (0.2%)	2 (0.2%)	5 (0.2%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	3 (0.2%)	2 (0.2%)	5 (0.2%)
Hepatic encephalopathy			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Seizure			
Not Related	1 (0.1%)	1 (0.1%)	2 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	1 (0.1%)	2 (0.1%)
<b>Pregnancy, puerperium and perinatal conditions</b>			
Cephalo-pelvic disproportion			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)

Table S6d. Grade 3 events (page 16 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Pregnancy, puerperium and perinatal conditions (continued)</b>						
Post abortion haemorrhage						
Not Related	4	(0.3%)	5	(0.4%)	9	(0.3%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	4	(0.3%)	5	(0.4%)	9	(0.3%)
Premature labour						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Vomiting in pregnancy						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
<b>Psychiatric disorders</b>						
Depressed mood						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Major depression						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Mood altered						
Not Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)

Table S6d. Grade 3 events (page 17 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Reproductive system and breast disorders</b>						
Adnexa uteri cyst						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Adnexa uteri mass						
Not Related	0	(0.0%)	1	(0.1%)	1	(<.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	1	(0.1%)	1	(<.1%)
Cervical dysplasia						
Not Related	1	(0.1%)	3	(0.2%)	4	(0.2%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	3	(0.2%)	4	(0.2%)
Coital bleeding						
Not Related	0	(0.0%)	2	(0.2%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	0	(0.0%)	2	(0.2%)	2	(0.1%)
Dysmenorrhoea						
Not Related	2	(0.2%)	2	(0.2%)	4	(0.2%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	2	(0.2%)	2	(0.2%)	4	(0.2%)
Menorrhagia						
Not Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Related	0	(0.0%)	0	(0.0%)	0	(0.0%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)

Table S6d. Grade 3 events (page 18 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Reproductive system and breast disorders (continued)</b>			
Metrorrhagia			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Ovarian cyst			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Pelvic pain			
Not Related	1 (0.1%)	1 (0.1%)	2 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	1 (0.1%)	2 (0.1%)
Perineal ulceration			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
<b>Respiratory, thoracic and mediastinal disorders</b>			
Dyspnoea			
Not Related	2 (0.2%)	0 (0.0%)	2 (0.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	2 (0.2%)	0 (0.0%)	2 (0.1%)
Epistaxis			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)

Table S6d. Grade 3 events (page 19 of 19)

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
	n (%)	n (%)	n (%)
<b>Skin and subcutaneous tissue disorders</b>			
Lipohypertrophy			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Rash maculo-papular			
Not Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Skin ulcer			
Not Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
<b>Vascular disorders</b>			
Hypertension			
Not Related	5 (0.4%)	0 (0.0%)	5 (0.2%)
Related	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total	5 (0.4%)	0 (0.0%)	5 (0.2%)

**Table S6e. Grade 2 events assessed by the managing clinicians as related to the study product (page 1 of 3)**

MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	Placebo (N=1316)		Dapivirine (N=1313)		Total (N=2629)	
	n	(%)	n	(%)	n	(%)
<b>Participants with Grade 2 or Higher Adverse Experiences Related to Study Product</b>						
Related	9	(0.7%)	7	(0.5%)	16	(0.6%)
Total	9	(0.7%)	7	(0.5%)	16	(0.6%)
<b>General disorders and administration site conditions</b>						
Application site pain						
Related	2	(0.2%)	0	(0.0%)	2	(0.1%)
Total	2	(0.2%)	0	(0.0%)	2	(0.1%)
<b>Infections and infestations</b>						
Cervicitis						
Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
Pelvic inflammatory disease						
Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
Urinary tract infection						
Related	1	(0.1%)	1	(0.1%)	2	(0.1%)
Total	1	(0.1%)	1	(0.1%)	2	(0.1%)
<b>Investigations</b>						
Neutrophil count decreased						
Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)
<b>Metabolism and nutrition disorders</b>						
Abnormal loss of weight						
Related	1	(0.1%)	0	(0.0%)	1	(<.1%)
Total	1	(0.1%)	0	(0.0%)	1	(<.1%)

**Table S6e. Grade 2 events assessed by the managing clinicians as related to the study product (page 2 of 3)**

	Placebo (N=1316)	Dapivirine (N=1313)	Total (N=2629)
MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product	n (%)	n (%)	n (%)
<b>Nervous system disorders</b>			
Headache			
Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
<b>Renal and urinary disorders</b>			
Urinary incontinence			
Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
<b>Reproductive system and breast disorders</b>			
Cervix erythema			
Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Cervix oedema			
Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Dysmenorrhoea			
Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)
Dyspareunia			
Related	0 (0.0%)	1 (0.1%)	1 (<.1%)
Total	0 (0.0%)	1 (0.1%)	1 (<.1%)
Pelvic pain			
Related	1 (0.1%)	2 (0.2%)	3 (0.1%)
Total	1 (0.1%)	2 (0.2%)	3 (0.1%)

**Table S6e. Grade 2 events assessed by the managing clinicians as related to the study product (page 3 of 3)**

	<b>Placebo (N=1316)</b>	<b>Dapivirine (N=1313)</b>	<b>Total (N=2629)</b>
<b>MedDRA System Organ Class and Preferred Term/ Maximum Relationship to Study Product</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>
<b>Reproductive system and breast disorders (continued)</b>			
Vulvovaginal pruritus			
Related	1 (0.1%)	0 (0.0%)	1 (<.1%)
Total	1 (0.1%)	0 (0.0%)	1 (<.1%)

<b>Table S7. Incident sexually transmitted infections during follow-up, by study arm</b>		
	<b>Placebo Vaginal Ring (n=1316)</b>	<b>Dapivirine Vaginal Ring (n=1313)</b>
<i>Chlamydia trachomatis</i>		
Number of cases during follow-up	368	359
Incidence per 100 person-years (95% CI)	17.7 (15.9-19.6)	17.4 (15.7-19.3)
<i>Neisseria gonorrhoeae</i>		
Number of cases during follow-up	190	170
Incidence per 100 person-years (95% CI)	9.1 (7.9-10.5)	8.2 (7.0-9.6)
<i>Trichomonas vaginalis</i>		
Number of cases during follow-up	183	190
Incidence per 100 person-years (95% CI)	8.8 (7.6-10.2)	9.3 (8.0-10.7)

Testing and treatment for sexually transmitted infections were performed semi-annually and more frequently when clinically indicated.

**Table S8. Proportion of HIV-1 seroconverters with antiretroviral resistance, by randomization arm**

Plasma samples for HIV-1 antiretroviral resistance testing were obtained at the visit at which HIV-1 seroconversion was detected (at which time study medication was withdrawn). Resistance testing was successfully completed on plasma from 170/174 (98%) participants, which included 3/3 participants acutely infected at enrollment, 164/168 HIV-1 seroconverters while on study product, and 3/3 participants who seroconverted after their product use end visit. Overall, 4 participants did not have a resistance result, 3 because of insufficient copies of HIV-1 RNA for extraction (<200 copies/mL) and 1 because of PCR amplification failure.

RNA extracted from plasma was reverse transcribed and HIV-1 *pol* was PCR amplified and sequenced using an in-house Sanger sequencing-based population genotyping assay optimized for non-B HIV-1 subtypes. Population sequences spanned from protease codon 1 through reverse transcriptase codon 335. The testing laboratory (Microbicide Trials Network Virology Core, University of Pittsburgh School of Medicine, Division of Infectious Diseases) was certified to perform the in-house genotyping assay by CLIA and the NIH-sponsored Viral Quality Assurance (VQA) Program at Rush Presbyterian, Chicago, IL. Mutations in HIV-1 Group M subtype were identified using the Stanford HIV-1 Drug Resistance Database version 7.0.

The frequency of all non-nucleoside reverse transcriptase (NNRTI) mutations were evaluated as mutations of potential clinical significance for resistance to dapivirine. Of the 164 participants with successful viral resistance results within the intention-to-treat cohort (i.e., excluding acutely infected participants and participants that seroconverted after cessation of product use), 10 out of 96 (10.4%) in the placebo arm had any NNRTI resistant strain, and 8 out of 68 (11.8%) in the dapivirine arm had any NNRTI resistant strain. The overall occurrence of NNRTI mutations was not different by arm (Fisher's Exact Test: 0.19, p=0.80).

Additional analyses examined the frequencies of a subset of four NNRTI resistance mutations including L100I, K103N, E138K and Y181C because of their potential relationship to dapivirine resistance based on *in vitro* selection studies.<sup>10</sup> No subjects had HIV-1 with the E138K, L100I or Y181C detected. Four subjects had HIV-1 with the K103N mutation however the frequency of K103N detection did not differ by arm (Table S6A). Other NNRTI mutations detected included V90I, K101E, K103S, V106M,

V108I, E138A/G, V179D/I/T and H221Y but the frequency of detection of these mutations also did not differ by arm (Table S6B). Several NNRTI mutations were observed to occur in combination, including E138A or G with V179D/I/T (n=2), V108I (n=1) or K101E (n=2); K103S with V106M (n=1) and V90I with K103N (n=2), but the frequency of more than one NNRTI mutation was not different between study arms.

<b>Table S8A. Non-nucleoside reverse transcriptase mutation conferring potential resistance to dapivirine</b>		
	<b>Placebo Vaginal Ring</b>	<b>Dapivirine Vaginal Ring</b>
<b>L100I</b>		
Overall	0/101 (0%)	0/69 (0%)
Among subjects retrospectively found to be HIV-1 infected at enrollment	0/3 (0%)	0/0 (0%)
Among subjects who acquired HIV-1 infection after enrollment while on study product	0/96 (0%)	0/68 (0%)
Among subjects who acquired HIV-1 infection after the product use end visit	0/2 (0%)	0/1 (0%)
<b>K103N</b>		
Overall	2/101 (2.0%)	2/69 (2.9%)
Among subjects retrospectively found to be HIV-1 infected at enrollment	0/3 (0%)	0/0 (0%)
Among subjects who acquired HIV-1 infection after enrollment	1/96 (1.0%)	2/68 (2.9%)
Among subjects who acquired HIV-1 infection after the product use end visit	1/2 (50.0%)	0/1 (0%)
<b>E138K</b>		
Overall	0/101 (0%)	0/69 (0%)
Among subjects retrospectively found to be HIV-1 infected at enrollment	0/3 (0%)	0/0 (0%)
Among subjects who acquired HIV-1 infection after enrollment	0/96 (0%)	0/68 (0%)
Among subjects who acquired HIV-1 infection after the product use end visit	0/2 (0%)	0/1 (0%)
<b>Y181C</b>		
Overall	0/101 (0%)	0/69 (0%)
Among subjects retrospectively found to be HIV-1 infected at enrollment	0/3 (0%)	0/0 (0%)
Among subjects who acquired HIV-1 infection after enrollment	0/96 (0%)	0/68 (0%)
Among subjects who acquired HIV-1 infection after the product use end visit	0/2 (0%)	0/1 (0%)

<b>Table S8B. Non-nucleoside reverse transcriptase mutations of potential clinical significance among subjects who acquired HIV-1 after enrollment*</b>		
	<b>Placebo Vaginal Ring</b>	<b>Dapivirine Vaginal Ring</b>
V90I	1/96 (1.0%)	2/68 (2.9%)
K101E	1/96 (1.0%)	1/68 (1.5%)
K103S	0/96 (0%)	1/68 (1.5%)
V106M	0/96 (0%)	1/68 (1.5%)
V108I	0/96 (0%)	1/68 (1.5%)
E138A	5/96 (5.2%)	3/68 (4.4%)
E138G	0/96 (0%)	1/68 (1.5%)
V179D	2/96 (2.1%)	1/68 (1.5%)
V179I/T	0/96 (0%)	1/68 (1.5%)
H221Y	1/96 (1.0%)	1/68 (1.5%)

\* No instances of these mutations occurred in subjects retrospectively found to be HIV-1 infected at enrollment or among subjects who acquired HIV-1 infection after the product use end visit.

## Supplementary Figure Legends.

**Figure S1. HIV-1 testing algorithm.** All study sites performed HIV-1 testing using a standard algorithm. All sites were validated in the algorithm prior to initiating the study and all participated in ongoing proficiency testing throughout the course of the study. The HIV-1 test kits used at each site were pre-approved prior to use; at each testing time point when rapid tests were used at least one FDA-approved rapid test kit was used. If rapid HIV-1 testing found a positive result for either or both rapid assays, confirmatory HIV-1 Western blot and RNA PCR were done, as well as testing for antiretroviral resistance. All Western blot testing was performed using FDA-approved test kits. Individuals acquiring HIV-1 were offered to continue with follow-up and were referred to local services for HIV-1 care and support. Seroconversion events were adjudicated by an HIV-1 endpoints committee that was blinded to randomization assignment.

**Figure S2. Dapivirine detection in plasma during follow-up, a) overall and b) by study site.** Plasma was collected at quarterly follow-up visits and was tested for all available samples (n=9,459) for participants assigned to the trial's active dapivirine ring arm. In phase I/II studies, plasma concentrations >95 pg/mL were achieved in most subjects within 8 hours of ring use and thus concentrations >95 pg/mL were interpreted as indicating adherence to the dapivirine ring (dark purple). Concentrations between the lower limit of quantification (LLQ, 20 pg/mL) and 95 pg/mL potentially reflected adherence or, alternatively, use of the ring for only a few hours prior to the scheduled clinic visit (i.e., "white coat dosing") (medium purple). Levels below the LLQ (BLQ) reflected non-use of the ring (light purple). Visits at which the participant was on a protocol-defined product hold (e.g., due to pregnancy) or at which a sample was not available are also indicated (dark green and light green, respectively). The frequency of detection of dapivirine at concentrations >95 pg/mL increased over follow-up (generalized linear mixed model with random intercepts and adjusted for country,  $p < 0.001$ ). The >95 pg/mL cut-off was chosen to distinguish cases in which the ring was removed during the month and then reinserted immediately prior to a clinic visit (i.e., <8 hours). In a prior study of this ring, when the ring was placed under observation, it required at least 8 hours for plasma dapivirine concentrations to exceed 95 pg/mL in nearly all (88%) research participants.<sup>11,12</sup> In that same study, plasma dapivirine concentrations exceeded this concentration in nearly all (88%) participants for at least 24 hours after removal of the ring per protocol after 28 days. Thus, the use of the >95 pg/mL cut-off to define adherence may overestimate adherence for women who removed the vaginal ring for most of the month but reinserted >8 hours prior to a clinic visit.

**Figure S3. Dapivirine detection in returned, used rings: a) boxplot of dapivirine in returned rings by concentration of dapivirine in concurrently collected plasma and b) distribution of dapivirine quantity in returned rings and in unused control rings.**

Dapivirine was quantified in returned, used rings for subjects assigned to the active dapivirine vaginal ring arm. In total, 20,770 rings were tested, and for 7,106 visits, concurrently collected plasma was available (plasma was collected quarterly while rings were collected monthly). Dapivirine rings were loaded with 25 mg of dapivirine and, in phase I/II studies, released ~4 mg of dapivirine over a month of continuous use. In returned, used rings residual levels less than 23.5 mg were defined as adherent, to take into account dapivirine release across different individuals and allowed assay performance.

For Figure S3a, results are presented by plasma concentrations: below the lower limit of quantification (LLQ = 20 pg/mL) (BLQ), LLQ to 95 pg/mL, and >95 pg/mL. Adjusting for

site and visit, compared to rings from women with no detectable plasma dapivirine (BLQ), the average amount of dapivirine remaining in a ring was 0.29 mg (95% CI 0.07-0.51,  $p=0.01$ ) less in women with plasma levels between LLQ and 95pg/mL and 2.6 mg (95% CI 2.37-2.77,  $p<0.001$ ) less in plasma levels above 95 pg/mL.

Figure S3b shows the probability distribution functions for the amount of dapivirine measured in rings returned at visits where a participant's plasma dapivirine level was greater than 95 pg/mL (green) or less than 95 pg/mL (red). In addition, the probability distribution for unused active dapivirine arm rings, which were tested with each batch as an internal control, is presented (black). The grey line segment indicates a residual dapivirine amount of 23.5 mg, the definition proposed prior to the conclusion of the study that would define adherence. For control rings (which had not been used), 2.5% had dapivirine levels measured at less than 23.5 mg. The graph illustrates that, in general, visits at which plasma dapivirine concentrations were less than 95 pg/mL had residual dapivirine amounts in the rings relatively similar to, although lower than, control rings, while visits at which plasma dapivirine concentrations were greater than 95 pg/mL had lower residual dapivirine amounts. However, there was overlap in the distributions.

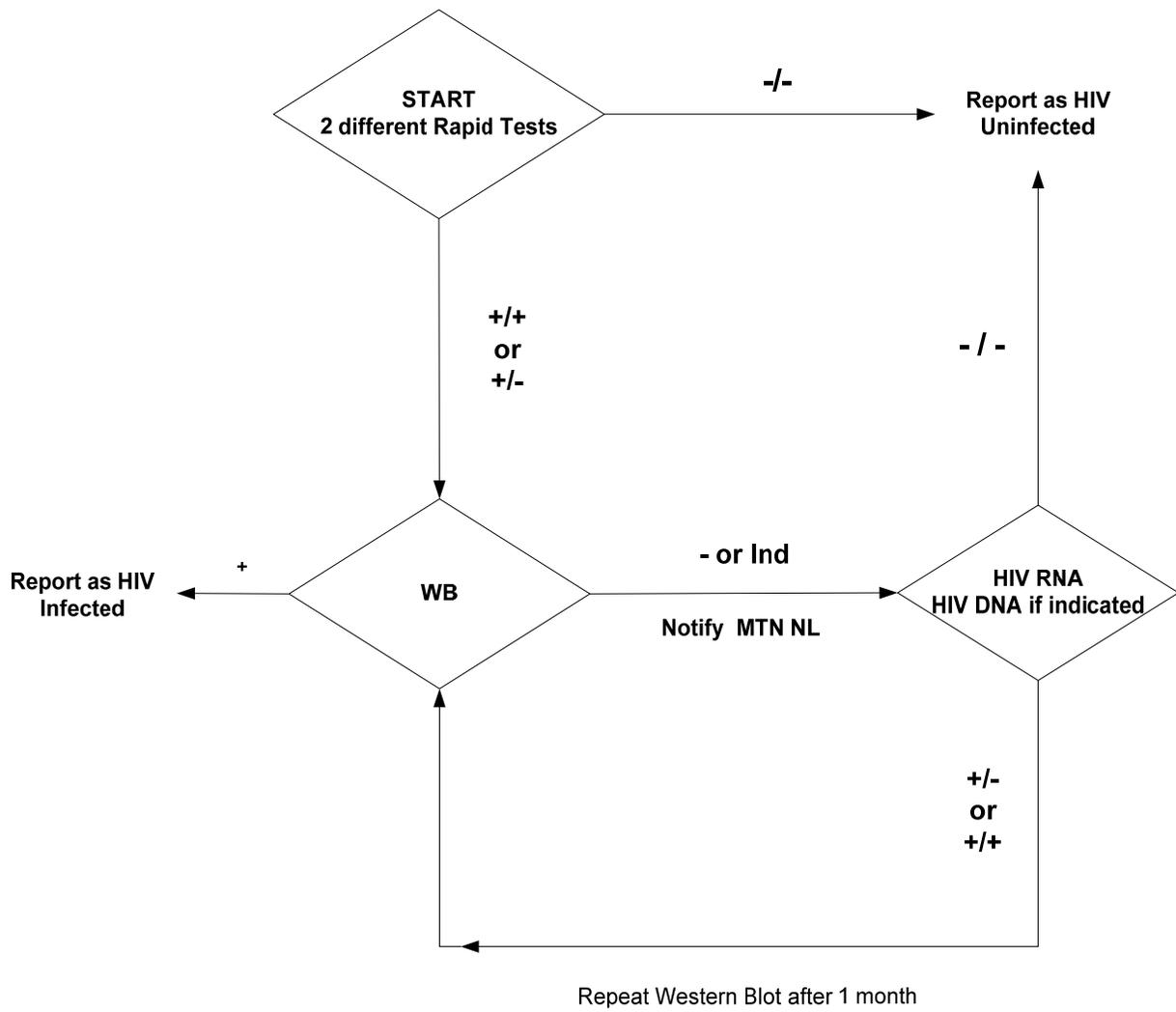
Thus, both the plasma dapivirine concentration of  $>95$  pg/mL and the residual ring amount of  $<23.5$  mg are susceptible to defining a visit as adherent when adherence was not necessarily sustained for the prior month.

**Figure S4. HIV-1 incidence by study arm, overall and among pre-specified subgroups.** Overall analyses include data from all 15 sites and from 13 of the 15 sites (i.e., excluding data from two sites, observed early in the study to have lower retention and adherence compared to other sites). The two excluded sites were among nine sites located in South Africa, seven of which were located in the KwaZulu-Natal province. Excluding those two sites, the relative risk reduction for HIV-1 for South Africa sites was 38% (95% CI 7-58%,  $p=0.02$ ,  $n=100$  events) and for KwaZulu-Natal 36% (95% CI 0-600%,  $p=0.05$ ,  $n=78$  events). The p-values for overall intention-to-treat analyses apply to the hypothesis of any evidence of HIV-1 protection (i.e., testing against a null hypothesis of 0%), which was defined in the trial's Statistical Analysis Plan as the primary trial comparison.

Pre-specified subgroup analyses – defined by age, country, educational status, marital status, the presence of a sexually transmitted infection at baseline, number of sexual partners, and whether women reported informing their primary partner about their use of the vaginal ring – were planned. For the subgroup analyses, p-values correspond to a test for significant interaction in the site-stratified Cox proportional hazards model. In the forest plots, dashed line indicates HR of 1.0 (0% HIV-1 protection). Subgroup analyses exclude information from two study sites defined early in the study period as having lower than anticipated retention and adherence.

**Figure S5. Adverse events occurring in  $>0.5\%$  of the study population.** Adverse events are ordered by the magnitude of difference between the study arms (dapivirine minus placebo). Blue triangles and red circles indicate the absolute proportion of subjects experiencing each adverse event in the dapivirine and placebo arms, respectively. Forest plots define the difference in frequency and 95% confidence interval. The study database recorded all Grade 2 or higher adverse events as well as all Grade 1 laboratory and genitourinary system events, regardless of assessed relationship to the study product.

Figure S1. HIV-1 testing algorithm



Ind: Indeterminate test results

Figure S2a. Dapivirine detection in plasma during follow-up

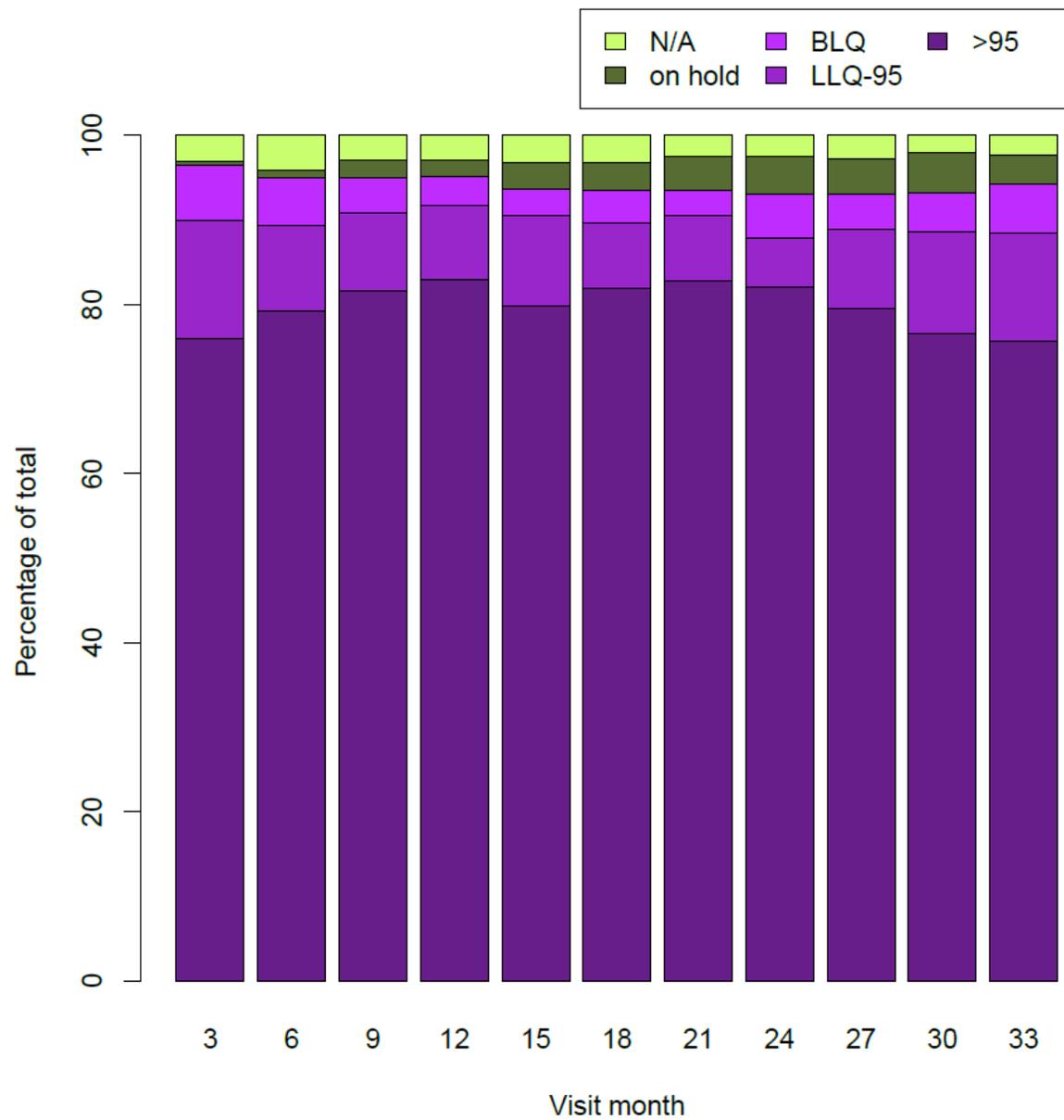


Figure S2b. Dapivirine detection in plasma during follow-up, by study site

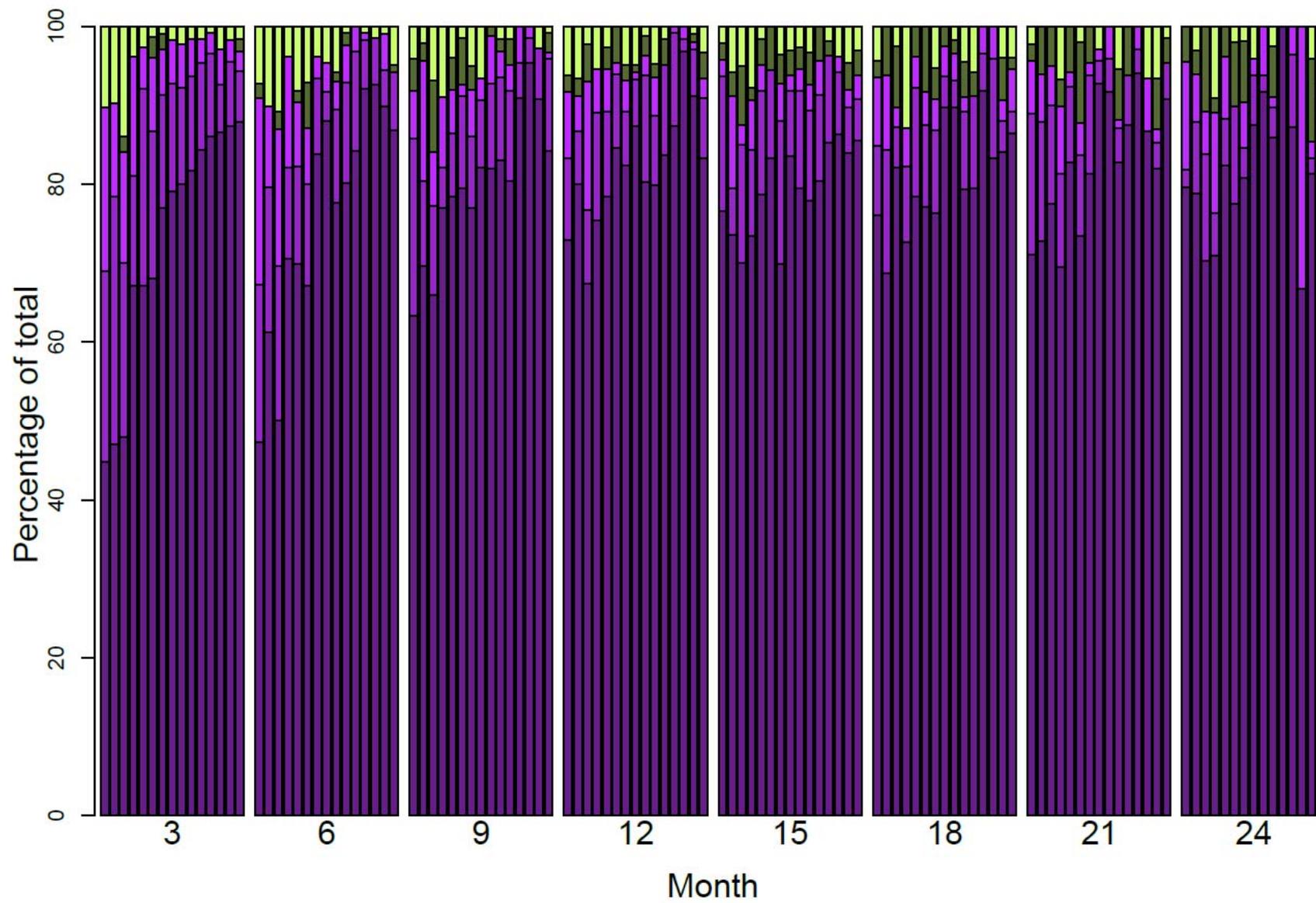


Figure S3a. Dapivirine detection in returned, used rings, by concentration of dapivirine in concurrently collected plasma

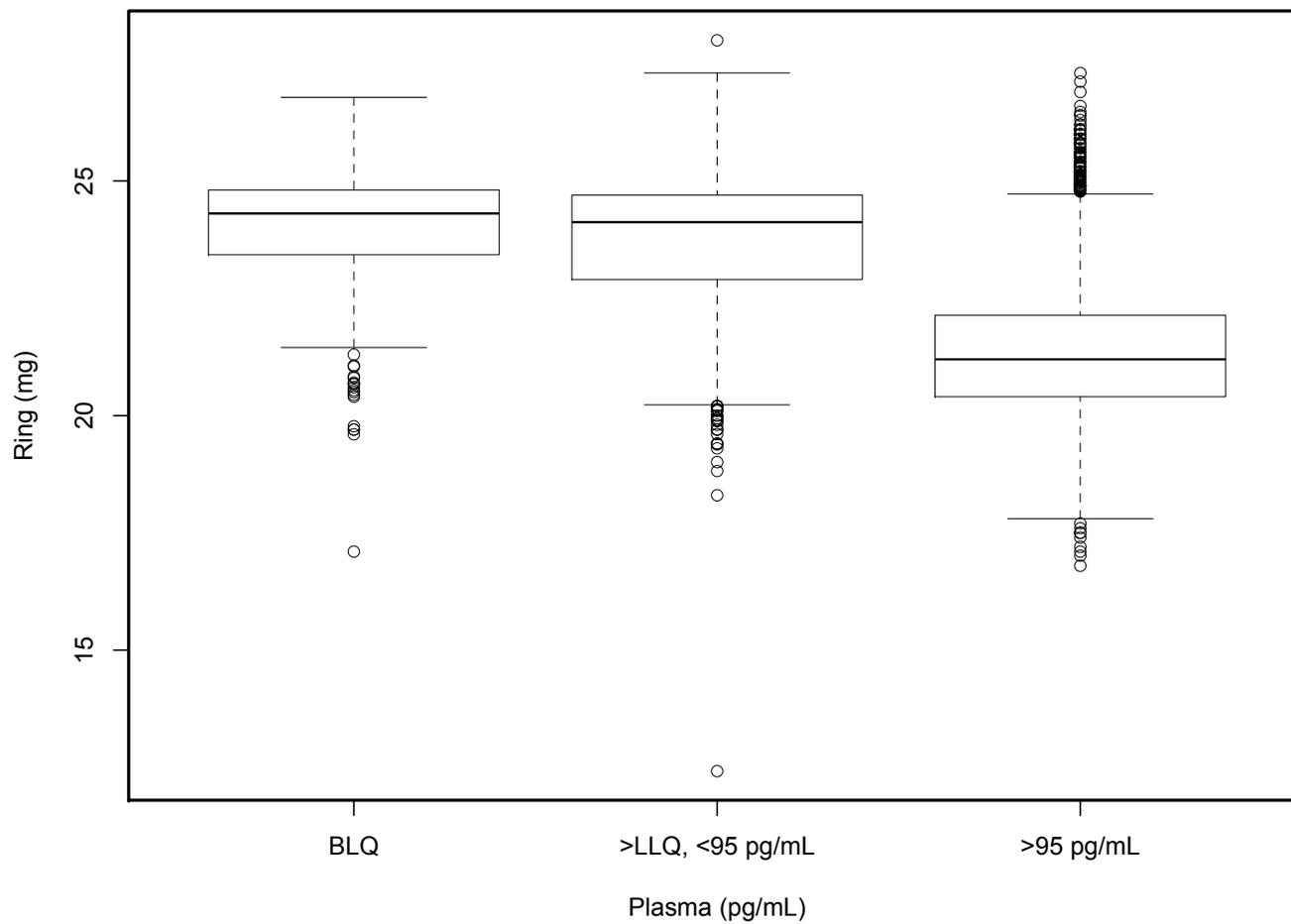
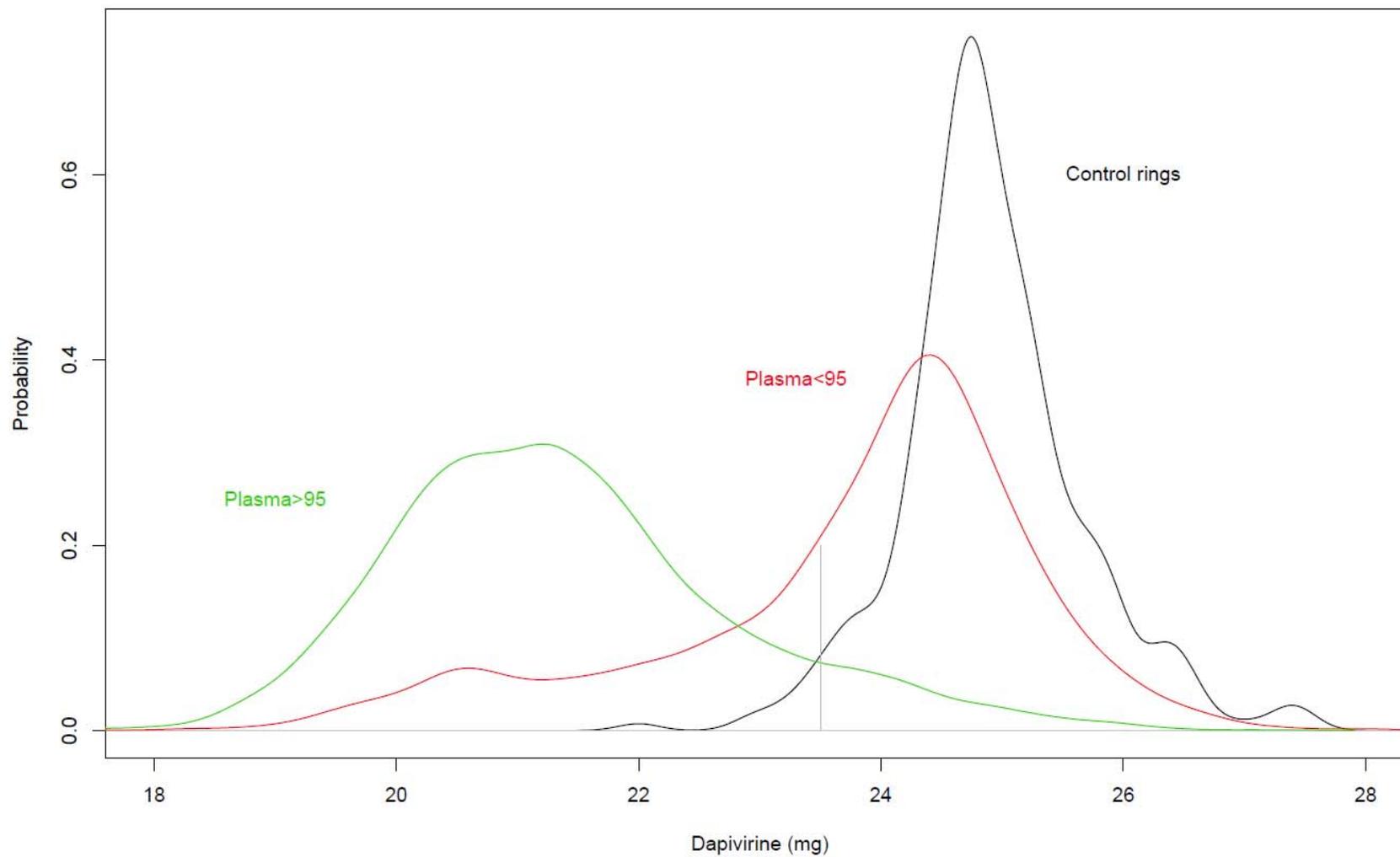


Figure S3b. Distribution of dapivirine quantity in returned rings and in unused control rings



**Figure S4. HIV-1 incidence by study arm, overall and among pre-defined subgroups.**

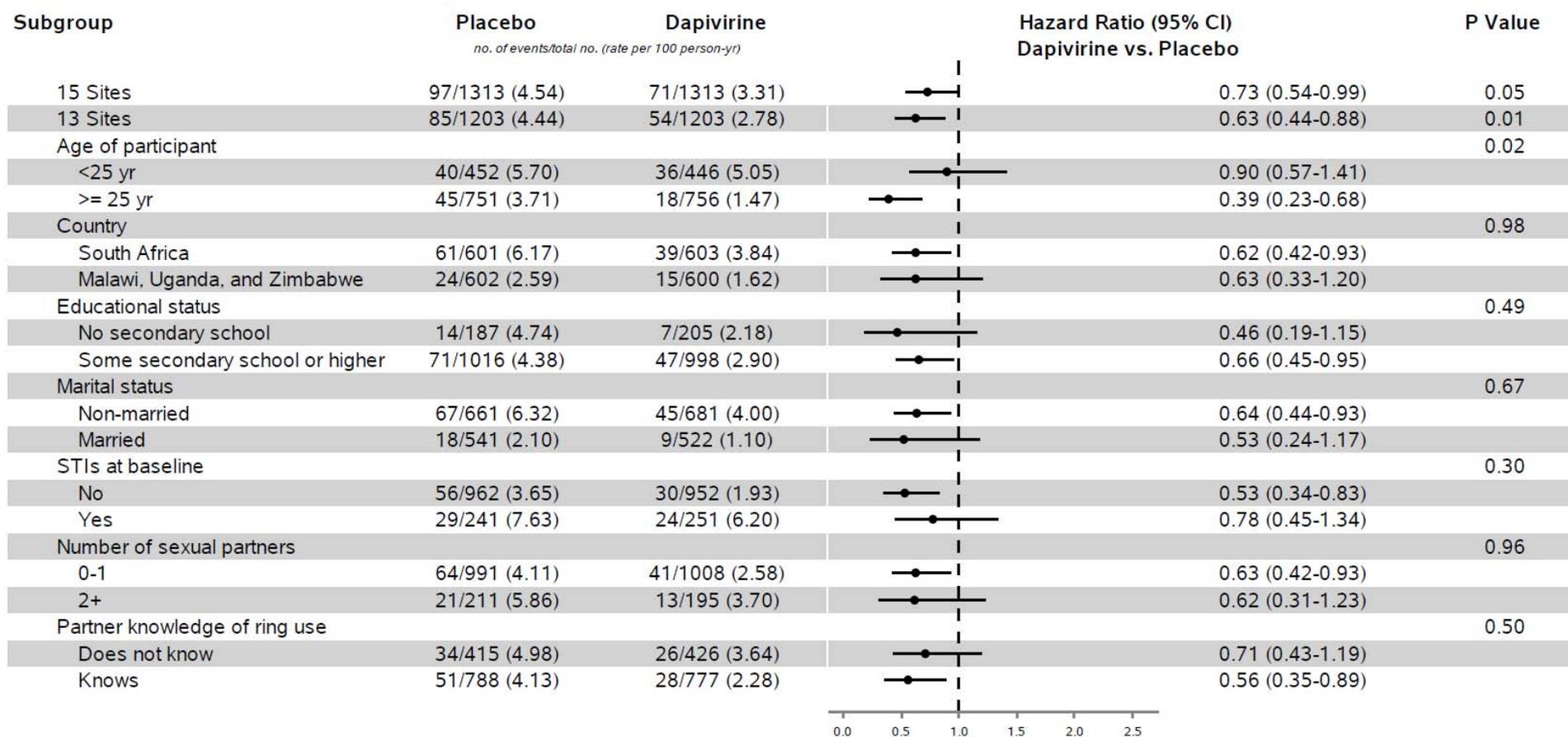
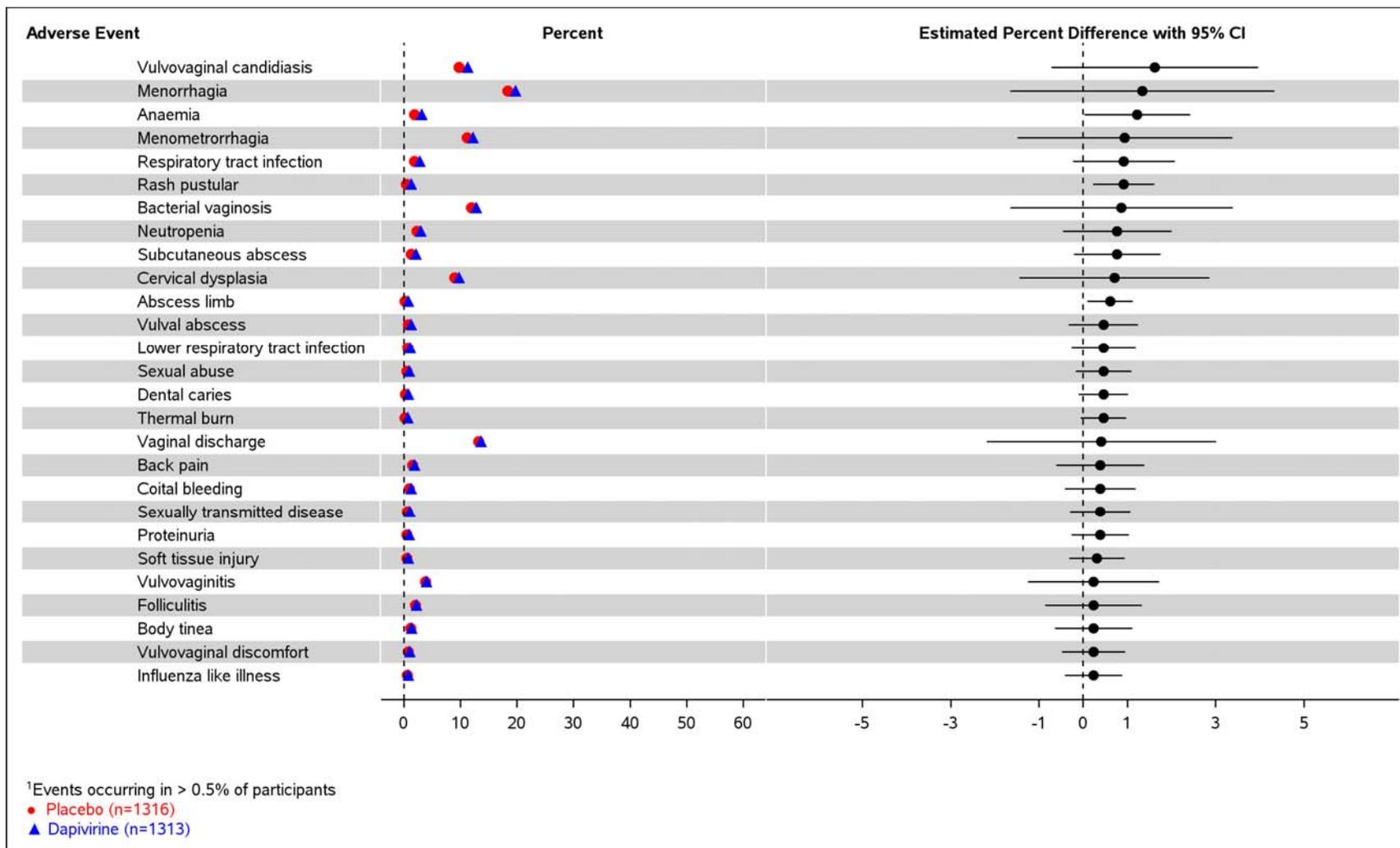
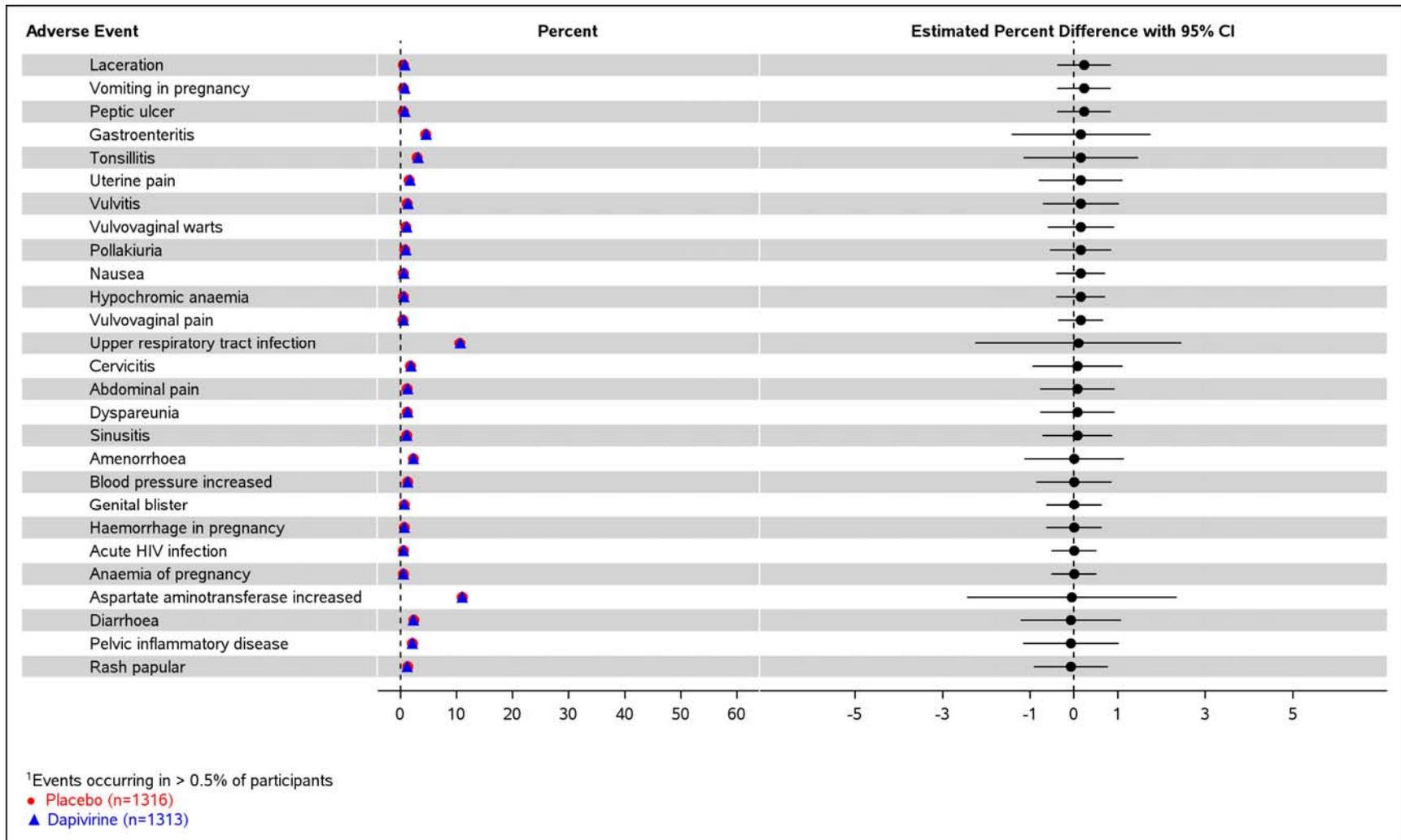
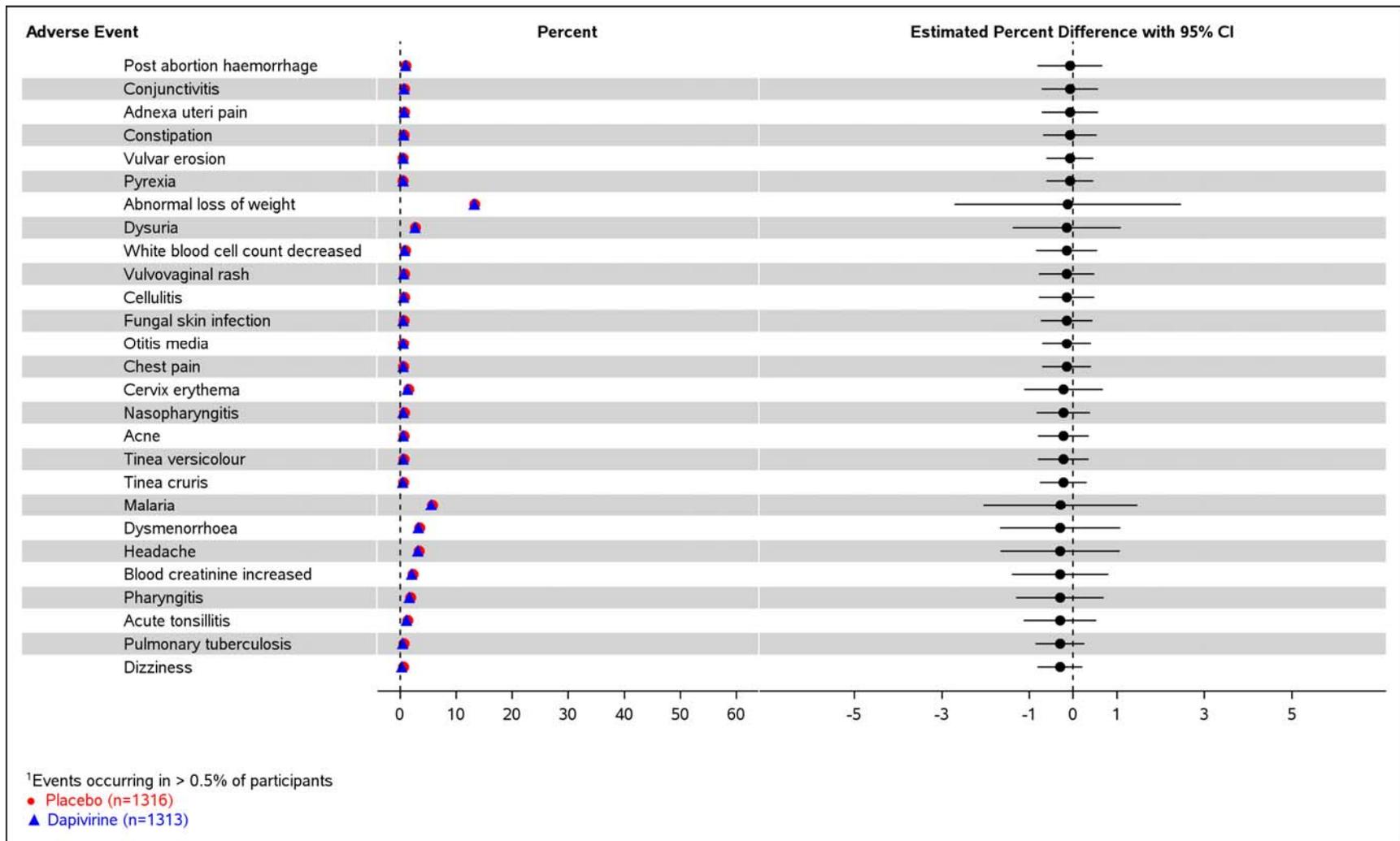
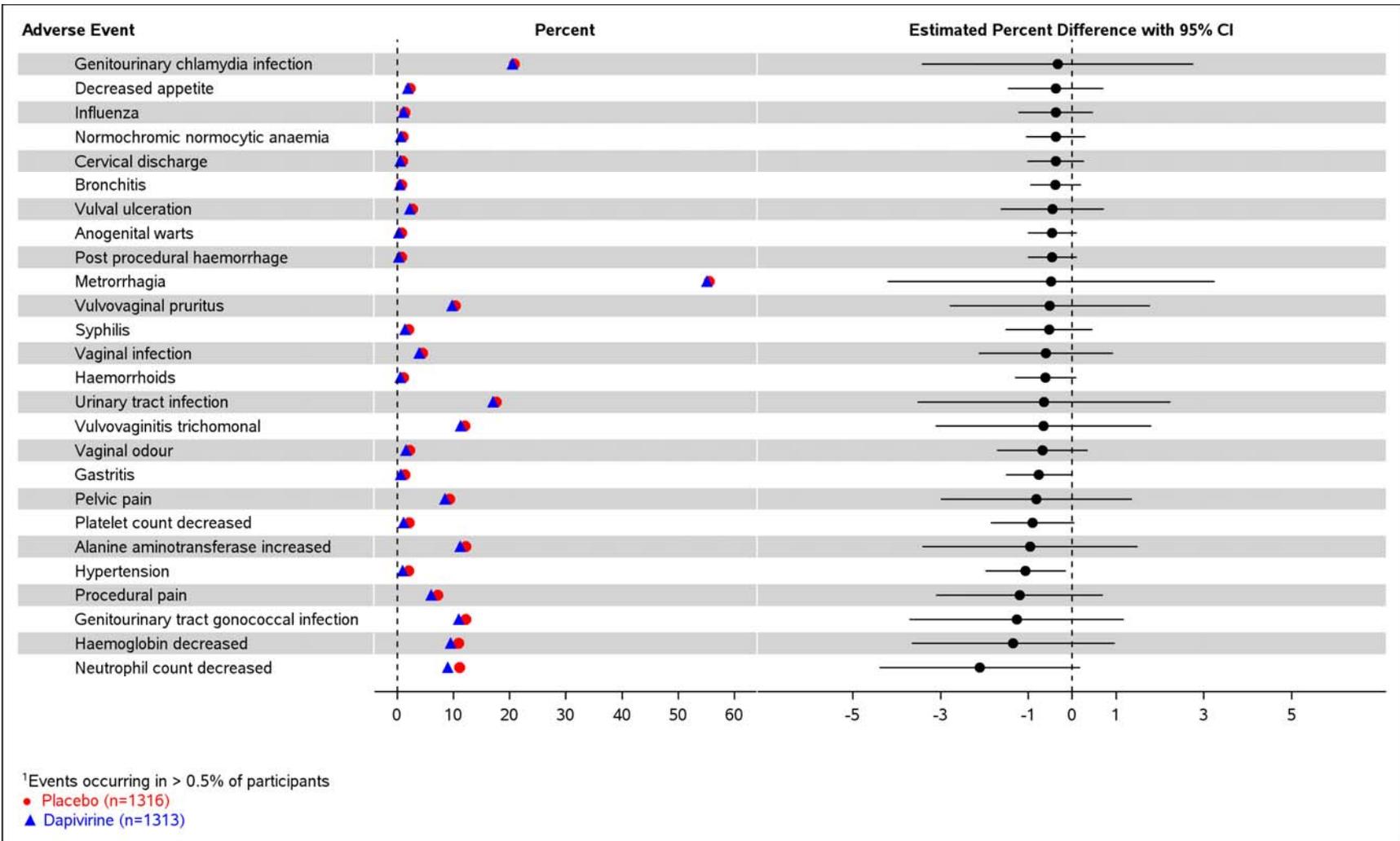


Figure S5. Adverse events occurring in >0.5% of the study population (in addition to Table 2) [4 pages]









### Supplementary Materials References

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